Internal Revenue Service (IRS) Office of Safeguards



Safeguard Security Report (SSR)

Template Version 1.1

[Agency Name]

[Agency Code]

Change to black font prior to submission

(font is blue to identify sections agencies need to populate)

[Reporting Year]

Insert 2014 for initial year

(reporting year was likely part of 2013, however, please include year SSR is submitted to IRS)

Template Change Control: Safeguard Security Report

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(font is blue to identify sections agencies need to populate)

Version	Release Date	Summary of Changes
1.0	January 23, 2014	Initial Release
1.1	March 20, 2014	Minor grammar and format revisions
		(Updated to address feedback obtained during office hours)

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Report Information			
Agency	[Insert legal agency name]	Agency Number:	[Insert agency code]
Name:			
		Date Submitted:	[Insert date of SSR submission]
			<u> </u>
IRS Reviewer:	[Leave blank]	IRS Reference Number	[Leave blank]
		and Date Received:	

- Insert date SSR is submitted to IRS Office of Safeguards
 - (Month DD, YYYY)

IRS will complete IRS Reviewer and IRS Reference Number/Date Received

Please adhere to the following guidelines when submitting correspondence, reports, and attachments to the Office of Safeguards:

Report Guidance

- Reports must be completed using official templates provided by the Office of Safeguards. The most current template may be downloaded from IRS.GOV, keyword "Safeguards" or requested by emailing SafeguardReports@irs.gov.
- Provide a response for all sections of this report unless instructed otherwise in individual section(s) by the IRS Office of Safeguards. If a particular section does not apply, please mark the agency response as "Not Applicable or NA" and provide an explanation.
- If the report refers to external file attachments, the reference should clearly identify the filename and section contained within the attachment being referenced.
- Attachments must be named clearly and identify the associated section in the SSR.
- Attachment filenames must follow a standardized naming convention (e.g., SSR2.1, SSR3.1).
- Do not embed the attachment into the SSR.
- For sections where attachments are not requested but require the agency to demonstrate that policies and/or procedures are documented, please provide the policy or procedure title and/or identifier, version number, date of last update, executive level-approver and a 2-3 sentence description of the policy/procedure contents. The IRS will request to evaluate the document during the next onsite review.

Submission Guidance

- SSR and all attachments should be sent electronically to the Office of Safeguards using Secure Data Transfer (SDT), if the agency participates in the SDT program. If the agency does not participate in SDT or SDT is otherwise not available, these transmissions should be sent via email to the SafeguardReports@irs.gov mailbox.
- Files must be sent encrypted via IRS approved encryption techniques using the standard Safeguards password. The password may be requested by contacting SafeguardReports@irs.gov.
- Upon receipt of your report submission, you should receive two confirmation messages. The first message will be an automated response shortly after the submission. The second confirmation will be sent by an Office of Safeguards staff member and will be routed internally to the appropriate case worker. If an automated confirmation is not sent back to you, there was an error in your submission. If this occurs, please send an e-mail back to the IRS Office of Safeguards mailbox without attachments and request assistance.
- Please note that the IRS Office of Safeguards does not accept hard copy submissions.

Safeguard Security Report Certification

The Mission of the Office of Safeguards is to promote taxpayer confidence in the integrity of the tax system by ensuring the confidentiality of IRS information provided to federal, state, and local agencies.

Recipient agencies that legally receive federal tax information (FTI) directly from either the IRS or from secondary sources (e.g., Social Security Administration [SSA], Office of Child Support Enforcement [OCSE]), pursuant to IRC 6103 or by an IRS-approved exchange agreement, must have adequate programs in place to protect the data received, and comply with the requirements set forth in IRS Publication 1075, *Tax Information Security Guidelines For Federal, State and Local Agencies*.

By signing this certification, the Agency Head certifies that the Safeguard Security Report (SSR):

- Addresses all Outstanding Actions identified by the IRS Office of Safeguards from the prior year's SSR
- Accurately and completely reflects the agency's current environment for the receipt, storage, processing and transmission of FTI
- Accurately reflects the security controls in place to protect the FTI in accordance with Publication 1075

Additionally, the Agency Head certifies that by receiving FTI directly from either the IRS or from secondary sources the agency will:

- Assist the IRS Office of Safeguards in the joint effort of protecting the confidentiality of FTI
- Report all data incidents involving FTI to the IRS Office of Safeguards and TIGTA timely and cooperate with TIGTA and Office of Safeguards investigators, providing data and access as needed to determine the facts and circumstances of the incident
- Support the on-site Safeguard review to assess agency compliance, including manual and automated compliance and vulnerability assessment testing and coordinating with information technology (IT) divisions to secure pre-approval, if needed, of automated system scanning
- Support timely mitigation of identified risk to FTI in the agency's Corrective Action Plan (CAP)

Agency H	Head Name	Agency Head Title
Signatur	e	Date
	SSR must be signed by agency head on at least a annual basis, and prior to SSR submission	n
	Note: a formal cover letter is no longer required wi	th the

agency submission as long as the certification page is

SSR Ter

1 Outstanding Actions

During review of the content of this report, the Office of Safeguards will identify sections that require update with the following year's SSR. This may be due to planned actions by the agency, controls planned or partially in place, or requests for additional information.

The following sections require agency updates in the next SSR submission.

[Leave blank for 2014 SSR submission]

- IRS Office of Safeguards will document comments throughout the SSR template under "IRS Response"
- Summarized responses will be included in Section 1: Outstanding Actions
- Throughout our review, we will proactively work with your agency (e.g., conference calls) to minimize open comments and provide clarification on how they can be addressed
- Revised submissions will not be required until the next annual reporting cycle for accepted SSRs

Include Name, Title, Mailing Address, Email address, and Telephone number for all agency point of contacts

2 Agency Information

The questions in Section 2, Age. Information must be updated annually.

2.1 Agency Director

Provide the name, title, address, email address and telephone number of the agency official, including but limited to: agency director or commissioner authorized to request FTI from the IRS, the SSA, or other authorized agency.

Usually the agency director level POC

2.2 Safeguards Point of Contact

Provide the name, title, address, email address and telephone number of the agency official responsible for implementing the safeguard procedures, including the primary IRS contact.

Usually a security manager, privacy officer or disclosure officer – would be the primary designated contact to work with IRS on operational matters

2.3 IT Security Point of Contact

Provide the name, title, address, email address and telephone number of the agency official responsible for implementing the safeguard procedures, including but not limited to the agency information technology security officer or equivalent.

Usually an IT security manager/officer, responsible for the implementation of safeguard procedures and compliance with Publication 1075 security controls

3 Current Period Safeguard Activities

The questions in Section 3, Current Period Safeguard Activities, pertain to the activities conducted by the agency during the specified reporting period. Section 3 must be updated annually.

Please provide all responses directly in the body if the SSR. If documentation is requested, please provide as an attachment.

Section 3 is for reporting only on the current period of safeguard activities

3.1.1 FTI Data Received (Current Reporting Period)

Summarize the FTI received during the reporting period (both electronic and non-electronic). At a minimum, include the: source, type of file or extract, and volume of records received. This could be extracts from IRS, data from SSA, OCSE, Bureau of Fiscal Service or other agencies, ad hoc requests received electronically or in paper.

Note: The reporting period's record keeping logs required in Publication 1075 Section 3 for electronic and non-electronic data would meet this requirement.

Publication 1075: Section 3.0

Agency SSR Response:

Please remove blue template guidance text prior to submission, and include agency SSR response in this field

<< Section 3 is for reporting only on the current period of safeguard activities – agency responses should include:

- Source
- Name of file/extract
- Volume

An overview of the basic data types and extracts the agency stores, transmits, or processes; as well as agency policies and procedures regarding record keeping requirements, shall be reported in Safeguarding Procedures (Sections 5-8)>>

IRS Response

The agency must establish a tracking system to identify and track the location of electronic and non-electronic FTI received by IRS. A log of FTI received from the IRS may include tracking elements, such as:

- o Taxpayer name or other identifying number
- o Tax year(s)
- o Type of information (e.g., revenue agent reports, Form 1040, work papers)
- o The reason for the request
- Date requested
- Date received
- o Exact location of the FTI
- Who has had access to the data
- If disposed of, the date and method of disposition

FTI must not be maintained in the log

3.1.2 Disposal of FTI (Current Reporting Period)

Summarize the FTI destroyed during the reporting period (both electronic and non-electronic). Include the method of destruction, media (paper, backup tapes, hard drive, etc.), and volume of records (or media) destroyed.

Note: The reporting period's record keeping logs required in Publication 1075 Section 3 for electronic and non-electronic data would meet this requirement.

Publication 1075: Section 8.0

Please note this section is specific to the current reporting cycle **only**. Please document all FTI disposed (or returned to the IRS) during the agency's current reporting period.

Section 8.1 (Disposal) will be used to document agency methods, policies, and procedures of FTI disposal (when not returned to the IRS) and will include a sample of the destruction log.

Agency SSR Response:

This section is for documenting how FTI has been sanitized and/or disposed during the agency's reporting cycle. The type of sanitization performed depends on two factors:

- Whether or not the media is to be reused by the agency for continued use with FTI
- Whether or not the media will be leaving agency control

Agencies electing to return IRS information must use a receipt process and ensure that the confidentiality is protected at all times during transport.

FTI furnished to the user and any paper material generated therefrom, such as copies, photo impressions, computer printouts, notes, and work papers, must be destroyed by burning or shredding. If a method other than burning or shredding is used, that method must make the FTI unreadable or unusable.

FTI must never be disclosed to an agency's agents or contractors during disposal unless authorized by the IRC. Destruction must be witnessed by an agency employee.

IRS requires that a log be maintained to log all FTI media sanitization actions that are performed.

Please report on what FTI was destroyed during the reporting period.

IRS Response:	
3.1.3 Re-disclosure of FTI Does the agency have a current (p)(2)(B) agreement(s)?	- 199
Has the agency re-disclosed FTI through a (p)(2)(B) agreement? Publication 1075: Section 11.4	- 199
3.1.4 Reports of Internal Inspections Has the agency completed all inspections identified in its plan for the reporting period? Please provide copies of a representative sampling of the Inspection Reports and a narrative of the corrective actions taken (or planned) to correct any deficiencies. Attachments: Internal inspection reports, or sampling of Publication 1075: Section 6.4	a copy of the executed agreement to

Agency SSR Response:			
Internal inspections are similar to a self-assessment mechanism	n, and are reported to IRS on an annual basis. Internal inspection		
templates are available on the Safeguards web site on IRS.gov.	Key areas that should be addressed by internal inspections		
include:			
Record Keeping			
Secure Storage	In addition to checking 'Yes' or 'No' for		
Limited Access	Section 3.1.4, please provide a copy (or		
• Disposal	sampling of) internal inspection reports from		
Computer Systems Security	the current reporting period. In the Agency		
See Publication 1075 Section 6.4 for additional detail.	SSR response, please document a narrative regarding how corrective actions have taken place, or will take place to correct any identified deficiencies from the inspections.		
IRS Response:	identified deficiences from the inspections.		
	The agency's inspection plan will be reviewed under Section 7.1 below.		
4 Changes to Safe	guarding Procedures		
The questions in Section 4. Changes to Safeguarding Proce	dures, pertain to any changes made by the agency during the		
specified reporting period. Section 4 must be updated ann			
	. If documentation is requested, please provide as an attachment.		
4.1 Current I	Period Changes		
4.1.1 Has the agency provided requested updates in this	□ Yes		
year's SSR to all sections identified as Outstanding	☐ No Question only applies to second year		
Actions from the previous submission?	SSRs and beyond		
	5		
4.1.2 Has the agency received any new forms of FTI, to	For initial SSR submissions in 2014, please state Not Applicable		
include extracts, MOU initiatives, or other forms of			
data sharing during the reporting period?	□ No		
	If Yes, briefly describe here and update section 5.1:		
4.1.3 Has the agency discontinued receipt or use of any FTI	☐ Yes		
during the reporting period?			
<u> </u>			
	If Yes, briefly describe here and update section 5.1:		
4.1.4 Has the flow of FTI changed due to the addition of a	☐ Yes		
business process, business unit, or new or enhanced	□ No		
information system?			
	If Yes, briefly describe here and update section 5.2:		
4.1.5 Has the agency conducted a review of staff with access	☐ Yes		
to FTI to ensure those whose status has changed have	□ No		
had their physical and/or system access removed?			

4.1.6 Has the agency added or changed contractors with access to FTI?	☐ Yes Contractors consist of, but are not limited to cloud computing providers, consolidated da centers, off-site storage facilities, shred companies, IT support, or tax modeling/revenue forecasting providers				
If Yes, has the agency submitted the appropriate 45 day notifications to the Office of Safeguards? Publication 1075: Section 7.4.3	☐ Yes (question applies to contactor companies) ☐ No If Yes, briefly describe here and update section 5.2:				
4.1.7 Has the agency made any changes or enhancements to its information technology systems, to include hardware, software, IT organizational operations (movement to state run data center), or system security?	☐ Yes ☐ No If Yes, briefly describe here and update section 9.2:				
 4.1.8 Has the agency made any changes or enhancements to its physical security, to include: New or additional office locations Off-site storage or disaster recovery sites Data centers Changes to two-barrier protection standard? 	☐ Yes ☐ No If Yes, briefly describe here and update section 9.3.11:				
4.1.9 Has the agency made any changes or enhancements to its retention and disposal policy or methods (e.g. outsourced disposal to shredding company, change in shredding equipment, off-site storage procedures and changes in retention period)?	☐ Yes ☐ No If Yes, briefly describe here and update section 8:				
4.1.10 Has the agency changed its use of FTI for the purpose of tax modeling? Publication 1075: Section 7.4.3	☐ Yes ☐ No If Yes, briefly describe here and update section 5.2:				
4.2 Planned Changes					
4.2.1 Is the agency planning any action that would substantially change current procedures or safeguarding considerations? Such major changes would include, but are not limited to, new computer equipment, facilities, or systems, or organizational changes.	☐ Yes ☐ No If Yes, briefly describe here:				
Safeguardir	ng Procedures				
	Although SSR submission is annual, please note 45 day notifications are still required throughout an agency's reporting cycle				

The questions in Sections 5 through 10 pertain to the procedures established and used by the agency for ensuring the confidentiality of FTI that is received, processed, stored, or transmitted to or from the agency. These sections should be updated as needed to accurately describe the procedures in place.

The IRS Office of Safeguards may request additional information be provided in subsequent SSR submissions. Those sections will be identified in the <u>Outstanding Actions</u> table.

Please provide all responses directly in the body of the SSR. If documentation is requested, please provide as an attachment.

5 FTI Flow and Processing

5.1 FTI Data

Document the data types and extracts the agency receives, processes, stores, or transmits to or from the agency. This could be extracts from IRS, data from SSA, OCSE, Bureau of Fiscal Service or other agencies, ad hoc requests received electronically or in paper. Please document how the agency complies with Publication 1075 record keeping requirements.

See Publication 1075 Section 3.0

Agency SSR Response:

Please remove blue template guidance text prior to submission, and include agency SSR response in this field

<< Different from Section 3.1.1: FTI Data Received (Current Reporting Period), please document all data types and extracts received, processed, stored, or transmitted by the agency. If the list provided in Section 3.1.1 (Currently Report Period) is all-inclusive, it can be referenced in Section 5.1.

Please document how the agency complies with Publication 1075 record keeping requirements.>>

IRS Response:

IMPORTANT! If contractors are permitted to view, access, process, store, transmit, or destroy FTI, please document under Section 5.2:

 Identify the contractor and provide specific information as to what they can and cannot do

5.2 FTI Flow

Provide a description of the flow of FTI through the agency from its receipt through its return to the IRS or its destruction

- All business units or offices that use FTI
- How it is used or processed
- How it is protected along the way

Describe whether FTI is commingled with agency data or separated.

- If FTI is commingled with agency data, describe how the data is labeled and tracked.
- If FTI is separated from all other agency data, describe the steps that have been taken to keep it in isolation.

Describe the paper or electronic products created from FTI (e.g. letters, agency reports, data transcribed, spreadsheets, electronic database guery results).

Describe where contractors are involved in the flow of FTI including, but not limited to, data processing, disposal, analysis, modeling, maintenance, etc.

Note: Off-site storage and/or disaster recovery staff, consolidated data center staff or contractor functions must be described. **Attachments:** FTI flow diagram(s) [recommended]

See Publication 1075 Section 3.0

Agency SSR Response:

Logical flow of FTI from the point it is received to its end point destination.

Since we look at all systems that "receive, store, process and transmit" FTI, we need to understand where the data flows through the network, access points, and systems that it flows through or is stored in.

- For example, if data is received from the hub at an XML gateway and then passed from there to database server, does it pass through different network segments?
- What devices does it pass through at each hop, e.g., firewall, switch, router, FTP server?
- From the database server, is it queried by an application server to be processed by an end user on a workstation?
- Include networked multi-functional printer/scanner/fax devices if those are involved in processing FTI.
- Describe the paper or electronic products created from FTI (e.g. letters, agency reports, data transcribed, spreadsheets, electronic database query results).
- Include online backup servers for data backups.
- Identify if field offices that electronically access FTI, the method of connectivity (e.g. VPN), as well as any other forms of remote access and the path that takes, e.g., workstation to VPN concentrator.
- For communication channels, provide transmission protocol (e.g. HTTP, HTTPS, FTP, SFTP)
- Describe where contractors are involved in the flow of FTI including, but not limited to, data processing, disposal, analysis, modeling, maintenance, etc.

The best way to do this is provide a network diagram that shows the various hops, systems along the path, and access points.

Commingling relates to how the data is stored and stems from the requirement of Publication 1075 Section 5.2. When data is commingled, it must be identified at the most minor level. For example, if data is commingled at the table level, i.e. a database which contains dedicated FTI and non-FTI data tables, the dedicated FTI tables must be labeled in such a way so that it is readily apparent that those tables contain FTI.

If data is commingled within a table that includes FTI and non-FTI data, the FTI data must be labeled at the element level.

IRS Response:

6 System of Records

6.1 System of Records

Describe the permanent record(s) (logs) used to document requests for, receipt of, distribution of (if applicable), and disposition (return to IRS or destruction) of the FTI (including tapes or other removable media) (e.g. FTI receipt logs, transmission logs, or destruction logs in electronic or paper format.)

Note: Agencies are expected to be able to provide an "audit trail" for information requested and received, including any copies or distribution beyond the original document or media.

Attachments: Sample agency logs [recommended]

Publication 1075: Section 3.0

Agency SSR Response:

Publication 1075 has a record keeping requirement that states all <u>requests</u> for, <u>receipt</u> of, <u>distribution</u> of and <u>disposal</u> of FTI. This record keeping should include internal requests among agency employees as well as requests outside of the agency.

If you're process is completely digital, and no paper FTI is involved in your process, then you can refer to the system audit logging mechanisms that are in place on the various systems involved in processing FTI.

If you have any printed FTI or printed files containing FTI, then the distribution of those files to various departments must be logged. See Publication 1075 section 3.3 for the suggested data to capture on the log.

This also applies to electronic media, e.g., backup media.

IRS Response:

7 Other Safeguards

7.1 Describe the agency's process for conducting internal inspections of headquarters, field offices, data center, offsite storage, and contractor sites. The agency must submit its internal inspection plan, detailing the timing of all internal inspections in the current year and next two years (three-year cycle).

Attachments: Internal inspection plan, or sampling of

Publication 1075: Section 6.4

Agency SSR Response:

Internal inspections are similar to a self-assessment mechanism, and are reported to IRS on an annual basis. In this section, we are looking to see a plan is in place to conduct internal inspections. The plan should detail the timing of all internal inspections in the current year and next two years (3 year cycle). This would include all the locations where FTI is stored or processed, e.g., data center, field offices, headquarters, etc.

Key areas that should be addressed by internal inspections include:

- Record Keeping
- Secure Storage
- Limited Access
- Disposal
- Computer Systems Security

See Publication 1075 Section 6.4 for additional detail.

IRS Response:

Agencies must establish a review cycle as followed:

- Local offices receiving FTI: at least every three years
- Headquarters office facilities housing FTI and the agency computer facility: at least every 18 months
- All contractors with access to FTI, including a consolidated data center or off-site storage facility: at least every 18 months

7.2 Describe the process for detecting and monitoring deficiencies identified during audits and internal inspections and how they are tracked in a Plan of Actions and Milestones (POA&M).

Publication 1075: Section 6.5

Agency SSR Response:

Describe how any weaknesses or vulnerabilities identified during internal inspection efforts are tracked for mitigation.

IRS Response:

Please note this is separate from CAP reporting and refers to how the agencies tracks findings/vulnerabilities identified during self-assessments and through internal inspections

Agency specific "POA&M" can be provided to support implementation of this security requirement.

8 Disposal

8.1 Describe the method(s) of FTI disposal (when not returned to the IRS) and a sample of the destruction log. For example, burning and shredding are acceptable methods of FTI disposal. Identify the specifications for each destruction method used (e.g shred size). If FTI is returned to the IRS, provide a description of the procedures.

Note: The IRS will request a written report documenting the method of destruction and that the records were destroyed.

Attachments: Destruction/disposal log template

Different from Section 3.1.2: Disposal of FTI, please reference the procedures established by the agency for ensuring proper FTI disposal methods in accordance with Pub 1075 and include a sample of the destruction log.

Agency SSR Response:

Agencies electing to return IRS information must use a receipt process and ensure that the confidentiality is protected at all times during transport.

FTI furnished to the user and any paper material generated therefrom, such as copies, photo impressions, computer printouts, notes, and work papers, must be destroyed by burning or shredding. If a method other than burning or shredding is used, that method must make the FTI unreadable or unusable.

FTI must never be disclosed to an agency's agents or contractors during disposal unless authorized by the IRC. Destruction must be witnessed by an agency employee.

See SAMPLE destruction log below in the embedded Excel spreadsheet.



Sample Destruction Log.xls

For electronic logs, the log must contain the following:

- date received
- control number and/or file name & contents
- recipient
- number of records, if available
- movement
- if disposed of, the date and method of disposition.

The Department of Justice, state tax agencies, and SSA may be exempted from the requirement of having agency personnel present during destruction by a contractor. If a contractor is used:

- The contract must contain the required safeguard language in Exhibit 7, Safeguarding Contract Language.
- Destruction of FTI must be certified by the contractor when agency participation is not present.
- It is recommended that the agency periodically observe the process to ensure compliance.

Non-electronic (paper) logs should include: A listing of all documents received from the IRS must be identified by:

- taxpayer name
- tax year(s)
- type of information (e.g., revenue agent reports, Form 1040, work papers)
- the reason for the request
- date requested
- date received
- exact location of the FTI
- who has had access to the data and

if disposed of, the date and method of disposition.

IRS Response:

Users of FTI are required by IRC 6103(p)(4)(F) to take certain actions after using FTI to protect its confidentiality (see Exhibit 2, *USC Title 26, IRC 6103(p)(4)*, and Exhibit 5, *Civil Damages for Unauthorized Disclosure*). Agency officials and employees either will return the information (including any copies made) to the office from which it was originally obtained or destroy the FTI. Please include a description of the procedures implemented. See Section 7.0, *Reporting Requirements—6103(p)(4)(E)* of Pub 1075 for additional reporting requirements.

[Agency code] Safeguard Security Rep

9 Information Security Cont

The questions in Section 9, Information Security Controls, are required for a mapped directly to their corresponding sections in Publication 1075 (e.g., se discussed in Section 9.3.13 of Publication 1075).

Information security controls are derived from Publication 1075. Please contact the IRS Office of Safeguards at SafeguardReports@irs.gov for clarification regarding any of the security control requirements

Please provide all responses directly in the body of the SSR. If documentation is requested, please provide as an attachment.

For sections related to policy and procedures (the first control in each of the control families beginning with section 9.3.1), please provide the title of the appropriate document(s), reference or identification number(s), version/release number, review or update date(s), executive level-approver, and a short summary of the content of the document(s) as it relates to that control family.

9.1.1 Provide the name and physical address where the agency's IT equipment resides (e.g. data center, computer room). Please include any secondary and/or disaster recovery data centers where FTI is housed (multiple entries are acceptable when applicable).

Agency SSR Response:

This is referring to the primary data center location, so whether that is a state data center or contractor/provider site.

IRS Response:

Please include any secondary and/or disaster recovery data centers where FTI is housed (multiple entries are acceptable when applicable)

- Please specify disaster recovery, or COOP related data centers
- **9.1.2** Describe the following pertaining to data center or computer room operations:
 - Identify if the facility is operated by a consolidated state-wide data center, a private contractor, or entirely by the agency
 - Describe other state agencies and/or departments that have access to this facility
 - Describe whether FTI access is granted to other agencies or tribes

Agency SSR Response:

Please include details about the data center location. We like to understand the lay of the land with respect to other tenants co-located in the data center who would have personnel with physical access to the systems with FTI. This is an important point for cloud environments or outsourced environments.

IRS Response:

Please include any secondary and/or disaster recovery data centers where FTI is housed (multiple entries are acceptable when applicable)

- Please specify disaster recovery, or COOP related data centers

9.2 Electronic Flow

Provide a description of the electronic flow of FTI within all IT equipment and network devices that process, receive, store, transmit and/or maintain the data. For each device described in the flow that stores, transmit, processes, or receives FTI, identify the following:

- Platform (e.g. Mainframe, Windows, Unix/Linux, Router, Switch, Firewall)
 - If mainframe, number of production LPARs with FTI, security software (e.g. RACF, ACF2)
 - o If not mainframe, number of production servers or workstations that store or access FTI.
- Operating System (e.g. zOS v1.7, Windows 2008, Solaris 10, IOS)
- Application Software (Commercial Off The Shelf or custom) used to access FTI
- Software used to retrieve FTI (e.g. SDT (Tumbleweed), CyberFusion, Connect:Direct)

Agency SSR Response:

Reuse the content that was provided in Section 3 Data Flow as it relates to the IT systems and not the department or organizational units that access the data.

In the agency's response please include information system components and technologies. Describe any safeguards in place to protect FTI (i.e., air-gapped networks). Please describe the process from original receipt of FTI to destruction in your response.

NOTE: If workstations are used to view FTI provided on media (ie, CD Rom) please describe this in the agency's response and provide details on the workstation (operating system and any software used to view the FTI).

IRS Response:

All Section 9 security controls must be addressed for all agencies. If a control is Not Applicable to the agency (based on the FTI received and/or processes in place to protect FTI) please ensure this information, including a justification explaining the applicability, is provided directly into the SSR.

9.3.1 Access Control (AC)

9.3.1.1 AC-1: Access Control Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) An access control policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.

 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Access control procedures to facilitate the policy and AC related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary access control policy and procedures. Access control policies and procedures shall include how the agency implements all applicable AC security controls

See IRS Publication 1075 Section 9.3.1.1 (page 44) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

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Please include the agency's review frequency for both policies and procedures.

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9.3.1.2 AC-2: Account Management

Describe how the agency authorizes access to information systems that receive, process, store, or transmit FTI based on a valid access authorization, need-to-know permission, and under the authority to re-disclose FTI under the provisions of IRC 6103. Include how the agency:

- A) Identifies and selects those accounts with access to FTI to support agency mission/business functions.
- B) Assigns account managers for information system accounts.
- C) Establishes conditions for group and role membership.
- D) Specifies authorized users of the information system, group and role membership, and access authorizations (i.e., privileges) and other attributes (as required) for each account.
- E) Requires approval for requests to create information system accounts.
- F) Creates, enables, modifies, disables, and removes information system accounts in accordance with documented agency account management procedures.
- G) Monitors the use of information system accounts.
- H) Notifies account managers when accounts are no longer required, when users are terminated or transferred, or when individual information system usage or need-to-know permission changes.
- Authorizes access to information systems that receive, process, store, or transmit FTI based on a valid access authorization, need-to-know permission, and under the authority to re-disclosed FTI under the provisions of IRC 6103.
- J) Reviews accounts for compliance with account management requirements at a minimum of annually for user accounts and semi-annually for privileged accounts.
- K) Establishes a process for reissuing shared/group account credentials (if deployed) when individuals are removed from the group.
- L) Automatically disables inactive accounts after 120 days of user inactivity. (CE3)

Agency SSR Response:

Please describe how the agency manages user accounts, including establishing, changing permissions, reviewing, and disabling or removing accounts. Please document how the agency implements each of the security control objectives and document applicable frequencies and/or organization defined values. Publication 1075 required values/frequencies have been included for your reference in the security control description.

Information system account types include, for example: individual, shared, group, system, guest/anonymous, emergency, developer/manufacturer/vendor, temporary, and service.

See IRS Publication 1075 Section 9.3.1.2 (pages 44-45) for further guidance.

IRS Response:

If agency defined/implemented frequencies do not satisfy the "Publication 1075 requirement" please include any compensating security measures the agency has implemented to ensure the confidentiality and integrity of FTI.

9.3.1.3 AC-3: Access Enforcement

Describe how the agency:

- A) Approves authorizations for logical access to information and system resources in accordance with applicable access control policies.
- B) Implements a role-based access control policy over defined subjects and objects and controls access to FTI based upon a valid access authorization, intended system usage, and the authority to be disclosed FTI under the provisions of IRC 6103.

Agency SSR Response:

The information system must enforce assigned authorizations for controlling system access.

See IRS Publication 1075 Section 9.3.1.3 (page 45) for further guidance.

IRS Response:

9.3.1.4 AC-4: Information Flow Enforcement

Describe how the agency approves authorizations for controlling the flow of FTI within the system and between interconnected systems based on the technical safeguards in place to protect the FTI.

Agency SSR Response:

The information system must enforce the flow of information within the system and between interconnected systems. Information flow control regulates where information is allowed to travel within an information system and between information systems (as opposed to who is allowed to access the information) and without explicit regard to subsequent accesses to that information. Flow control restrictions include, for example: keeping export-controlled information from being transmitted in the clear to the Internet, blocking outside traffic that claims to be from within the organization, restricting web requests to the Internet that are not from the internal web proxy server, and limiting information transfers between organizations based on data structures and content.

Enforcement occurs, for example: in boundary protection devices (e.g., gateways, routers, guards, encrypted tunnels, firewalls) that employ rule sets or establish configuration settings that restrict information system services, provide a packet filtering capability based on header information, or message filtering capability based on message content.

See IRS Publication 1075 Section 9.3.1.4 (page 45) for further guidance.

IRS Response:

9.3.1.5 AC-5: Separation of Duties

Describe how the agency ensures that only authorized employees or contractors (if allowed by statute) have access to FTI. Include how the agency:

- A) Separates duties between individuals to prevent harmful activity without collusion.
- B) Documents the roles and permissions used to separate duties.
- C) Defines information system access authorizations used to support the separation of duties for users authorized access to FTI.

Agency SSR Response:

The agency must ensure the information system enforces separation of duties through assigned access authorizations.

See IRS Publication 1075 Section 9.3.1.5 (page 46) for further guidance.

Examples of Separation of Duties:

- The person responsible for approving an action must not be the same person that implements the action
- The application development group must be separate from the production support group
- System administrators must not also have DBA privileges and vice versa

IRS Response

9.3.1.6 AC-6: Least Privilege

Describe how the agency employs the principle of least privilege. Describe how the agency:

- A) Employs the principle of least privilege, allowing only authorized accesses for users (or processes acting on behalf of users) that are necessary to accomplish assigned tasks in accordance with agency missions and business functions.
- B) Explicitly authorizes access to FTI. (CE1)
- C) Requires users of information system accounts, or roles, with access to FTI, to use non-privileged accounts or roles when accessing non-security functions. (CE2)
- D) Restricts privileged accounts on the information system to a limited number of individuals with a need to perform administrative duties. (CE5)
- E) Audits the execution of privileged functions. (CE9)
- F) Prevents non-privileged users from executing privileged functions, including disabling, circumventing, or altering implemented security safeguards/countermeasures. (CE10)

Agency SSR Response:

The information system must enforce the most restrictive access capabilities users need (or processes acting on behalf of users) to perform specified tasks. Organizations employ least privilege for specific duties and information systems. The principle of least privilege is also applied to information system processes, ensuring that the processes operate at privilege levels no higher than necessary to accomplish required organizational missions/business functions. Organizations consider the creation of additional processes, roles, and information system accounts as necessary, to achieve least privilege. Agencies should apply least privilege to the development, implementation, and operation of organizational information systems.

See IRS Publication 1075 Section 9.3.1.6 (page 46) for further guidance.

IRS Response:

Suggested model:

- Deny all access to FTI, and grant privileges only as needed to perform job function(s)

9.3.1.7 AC-7: Unsuccessful Login Attempts

Document how the agency limits invalid logon attempts in those information systems processing, storing, and/or transmitting FTI:

- A) Document the number of consecutive invalid logon attempts allowed by a user and during what duration/time period before the user is locked out.
 - Per Publication 1075, the agency must enforce a limit of three consecutive invalid logon attempts by a user during a 120-minute period.
- B) Document the action taken the maximum number of attempts is reached.
 - Per Publication 1075, the agency must automatically lock the account until released by an administrator.

Agency SSR Response:

The information system must limit the number of consecutive unsuccessful access attempts allowed in a specified period and automatically perform a specific function (e.g., account lockout, delayed logon) when the maximum number of attempts is exceeded. Responses to unsuccessful logon attempts may be implemented at both the operating system and the application levels.

See IRS Publication 1075 Section 9.3.1.7 (page 46) for further guidance.

IRS Response

9.3.1.8 AC-8: System Use Notification

Before granting access to the system, describe how the agency displays an IRS-approved warning banner to users of information systems containing FTI.

- A) Document how the warning banner provides privacy and security notices consistent with applicable federal laws, Executive Orders, directives, regulations, standards, and guidance. Please provide the text of the warning banner, which must include:
 - The system contains U.S. Government information,
 - Users actions are monitored and audited,
 - Unauthorized use of the system is prohibited, and
 - Unauthorized use of the system is subject to criminal and civil sanctions.

Please note the warning banner must be applied at the application, database, operating system, and network device levels for all system components that receive, process, store, or transmit FTI. Please document if all applicable components contain the approved warning banner, and if applicable, specify those that do not contain the required banner in your response.

- B) Document how the user acknowledges the warning banner prior to gaining system access. The warning banner must be retained on the screen until users acknowledge the usage conditions and take explicit actions to further access the information system.
- C) Document if the information system is publicly accessible and provide warning banner language. For publicly accessible information systems, the agency must:
 - Display an IRS-approved warning banner granting further access,
 - Display references, if any, to monitoring, recording, or auditing that are consistent with privacy accommodations for such systems that generally prohibit those activities, and
 - Include a description of the authorizes uses of the system.

For sample warning banners approved by the Office of Safeguards, see Exhibit 8 of Publication 1075.

Attachments: Screenshots of applicable warning banner(s), specify components and whether or not component is publicly accessible [recommended]

Agency SSR Response:

The information system must display an approved system usage notification before granting system access informing potential users of IRS Pub 1075 required usage language.

See IRS Publication 1075 Section 9.3.1.8 (page 47) for further guidance.

IRS Response:

In addition to narrative response, please provide screenshot(s) of the warning banner(s) in use at the agency for protecting information system(s) receiving, processing, storing, and/or transmitting FTI

- The warning banner **must be** applied at the application, database, operating system, and network device levels for all systems that receive, process, store, or transmit FTI

9.3.1.9 AC-11: Session Lock

Describe how the agency enforces AC policy by locking workstations and applications after a pre-defined period of user

- A) Document the duration of user inactivity the information system is configured to initiate a session lock. Per Publication 1075, the agency must prevent further access to the system by initiating a session lock after 15 minutes of inactivity or upon receiving a request from a user.
- B) Document the action taken to reestablish access.

Per Publication 1075, the agency must retain the session lock until the user reestablishes access using established identification and authentication procedures.

Agency SSR Response:

Session locks are temporary actions taken when users stop work and move away from the immediate vicinity of information systems but do not want to log out because of the temporary nature of their absences. Session locks are implemented where session activities can be determined. This is typically at the operating system level, but can also be at the application level.

See IRS Publication 1075 Section 9.3.1.9 (page 48) for further guidance.

IRS Response:

This control addresses the termination of user-initiated logical sessions in contrast to SC-10 which addresses the termination of network connections that are associated with communications sessions (i.e., network disconnect). A logical session (for local, network, and remote access) is initiated whenever a user (or process acting on behalf of a user) accesses an organizational information system

9.3.1.10 AC-12: Session Termination

Document if, and how the information system(s) automatically terminates a user session after a pre-defined period of inactivity.

Per Publication 1075, the agency must automatically terminate a user session after 15 minutes of inactivity.

This control addresses the termination of user-initiated logical sessions in contrast to SC-10 which addresses the termination of network connections that are associated with communications sessions (i.e., network disconnect).

Agency SSR Response:

The information system shall automatically terminate any remote session after fifteen minutes of inactivity, where these systems contain FTI. For instances of interactive and/or batch processing, compensating controls must be implemented.

Such user sessions can be terminated (and thus terminate user access) without terminating network sessions. Session termination terminates all processes associated with a user's logical session except those processes that are specifically created by the user (i.e., session owner) to continue after the session is terminated,

9.3.1.11 AC-14: Permitted Actions without Identification or Authentication

Document if the agency permits user actions on information systems receiving, processing, storing, or transmitting FTI without identification and authentication. Examples of access without identification and authentication would be instances in which the agency maintains a publicly accessible web site for which no authentication is required. If use actions are permitted, please address the following:

- A) Document how the agency identifies specific user actions that can be performed on the information system without identification or authentication consistent with agency missions/business functions. Please note, FTI may not be disclosed to individuals on the information system without identification and authentication.
- B) Document and provide supporting rationale for the user actions not requiring identification or authentication.

Note: If the agency does not permit actions without identification and authentication, please document in the agency response.

Agency SSR Response:

The agency must identify and document specific user actions that can be performed on the information system without identification or authentication.

This control addresses situations in which organizations determine that no identification or authentication is required in organizational information systems. Examples of access without identification and authentication would be instances in which the agency maintains a publicly accessible website for which no authentication is required. Agencies may identify actions that normally require identification or authentication but may under certain circumstances (e.g., emergencies), allow identification or authentication mechanisms to be bypassed. Management must supervise and review the activities of the users as this relates to information system access.

See IRS Publication 1075 Section 9.3.1.11 (page 48) for further guidance.

IRS Response:

Remote access is defined as any access to an agency information system by a user communicating through an external network, for example, the Internet. Any remote access where FTI is accessed over the remote connection must be performed using multi-factor authentication.

FTI cannot be accessed remotely by agency employees, agents, representatives, or contractors located offshore—outside of the United States territories, embassies, or military installations. Further, FTI may not be received, processed, stored, transmitted, or disposed of by IT systems located offshore.

9.3.1.12 AC-17: Remote Access

Remote access is defined as any access to an agency information system by a user communicating through an external network, for example: the Internet. Any remote access where FTI is accessed over the remote connection must be performed using multi-factor authentication. Please note, FTI cannot be accessed remotely by agency employees, agents, representatives, or contractors located offshore (outside the United States). Include how the agency:

- A) Establishes and documents usage restrictions, configuration/connection requirements, and implementation guidance for each type of remote access allowed.
- B) Authorizes remote access to the information system prior to allowing such connections.
- C) Authorizes and documents the execution of privileged commands and access to security-relevant information via remote access for compelling operational needs only. (CE4)
- D) Monitors and controls remote access methods to information systems containing FTI. (CE1)
- E) Implements cryptographic mechanisms to protect the confidentiality and integrity of remote access sessions where FTI is transmitted over the remote connection. (CE2)
- F) Routes all remote accesses through a limited number of managed network access control points. (CE3)

Note: If the agency does not permit remote access, please document in the agency response.

Agency SSR Response:

The agency must authorize, document, and monitor all remote access capabilities used on the system, where these systems containing FTI. Agencies often employ encrypted virtual private networks (VPNs) to enhance confidentiality and integrity over remote connections. The use of encrypted VPNs does not make the access non-remote; however, the use of VPNs, when adequately provisioned with appropriate security controls (e.g., employing appropriate encryption techniques for confidentiality and integrity protection) may provide sufficient assurance to the organization that it can effectively treat such connections as internal networks.

See IRS Publication 1075 Section 9.3.1.12 (pages 48-49) for further guidance.

IRS Response:

9.3.1.13 AC-18: Wireless Access

If information system(s) storing, processing, and/or transmitting FTI can be accessed on a wireless network, document how the agency:

- A) Establishes wireless access policies that define usage restrictions, configuration/connection requirements, implementation guidance for wireless access.
- B) Authorizes wireless access to the information system prior to allowing such connections.
- C) Employs a wireless intrusion detection system to identify rogue wireless devices and to detect attack attempts and potential compromises/breaches to the information system. (SI-4, CE14)
- D) Protects wireless access to the information system using authentication and encryption. (CE1)

Additional requirements for protecting FTI on wireless networks are provided in Section 9.4.18, Wireless Networks of Publication 1075.

Note: If the agency does not permit wireless access, please document in the agency response.

Agency SSR Response:

The agency must develop policies for any allowed wireless access, where these systems contain FTI. As part of the wireless access, the agency shall authorize, document, and monitor all wireless access to the information system.

Wireless technologies include, for example: microwave, packet radio (UHF/VHF), 802.11x, and Bluetooth. Wireless networks use authentication protocols (e.g., EAP/TLS, PEAP), which provide credential protection and mutual authentication.

See IRS Publication 1075 Section 9.3.1.13 (page 49) for further guidance.

IRS Response:			

9.3.1.14 AC-19: Access Control for Mobile Devices

If FTI can be accessed and/or retrieved from a mobile or portable device, describe how the agency:

- A) Establishes mobile device policies that define usage restrictions, configuration/connection requirements, implementation guidance for agency-controlled mobile devices.
- B) Authorizes the connection of mobile devices to agency information systems.
- C) Employs encryption to protect the confidentiality and integrity of information on mobile devices (e.g., smartphones and laptop computers). (CE5)
- D) Purges/wipes information from mobile devices based on 10 consecutive, unsuccessful device logon attempts (e.g., personal digital assistants, smartphones and tablets). Laptop computers are excluded from this requirement. (AC-7, CE2)

Additional requirements on protecting FTI accessed by mobile devices are provided in Section 9.4.8, Mobile Devices of Publication 1075.

Agency SSR Response:

A mobile device is a computing device that (i) has a small form factor such that it can easily be carried by a single individual; (ii) is designed to operate without a physical connection (e.g., wirelessly transmit or receive information); (iii) possesses local, non-removable, or removable data storage; and (iv) includes a self-contained power source.

The agency must develop policies for any allowed portable and mobile devices, where these systems contain FTI. As part of this, the agency shall authorize, document, and monitor all device access to organizational information systems.

See IRS Publication 1075 Section 9.3.1.14 (pages 49-50) for further guidance.

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9.3.1.15 AC-20: Use of External Information Systems

External information systems include any technology used to receive, process, transmit, or store FTI that is not owned and managed by the agency. Describe how the agency prohibits the following, unless approved by the Office of Safeguards:

- A) Access to FTI from external information systems.
- B) Use of agency-controlled portable storage devices (e.g., flash drives, external hard drives) containing FTI on external information systems. (CE2)
- C) Use of non-agency-owned information systems, system components, or devices to process, store, or transmit FTI.
 - Non-agency owned information system usage requires the agency to notify the Office of Safeguards 45 days prior to implementation (see Section 7.4, 45-Day Notification Reporting Requirements of Publication 1075). (CE3)

Document any exceptions and/or approvals granted by the Office of Safeguards.

Agency S	SSR R	Response	
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The agency must develop policies for authorized individuals to access the information systems from an external system.

See IRS Publication 1075 Section 9.3.1.15 (page 50) for further guidance.

IRS Response:		

9.3.1.16 AC-21: Information Sharing

Validate and describe how the agency restricts the sharing/re-disclosure of FTI to only those authorized in IRC 6103 and as approved by the Office of Safeguards.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.1.16 (page 50) for further guidance.

IRS Response:

9.3.1.17 AC-22: Publicly Accessible Content

Describe how the agency safeguards FTI in publicly accessible information systems. Include how the agency:

- A) Designates individuals authorized to post information onto a publicly accessible information system.
- B) Trains authorized individuals to ensure that publicly accessible information does not contain FTI.
- C) Reviews the proposed content of information prior to posting onto the publicly accessible information system to ensure that FTI is not included.
- D) Reviews content on publicly accessible information system(s) for FTI; and immediately removes it if and when it is discovered.

Per Publication 1075, the agency must review the content on the publicly accessible information system for FTI, at a minimum, quarterly and remove such information, if discovered.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.1.17 (page 50) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.2 Awareness and Training (AT)

9.3.2.1 AT-1: Security Awareness and Training Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A security awareness and training policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 - Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Security awareness and training procedures to facilitate the policy and AT related security controls. Please include details regarding procedure review/update.
 - Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary awareness and training policy and procedures.

See IRS Publication 1075 Section 9.3.2.1 (page 51) for further guidance.

IRS Response:

9.3.2.2 AT-2: Security Awareness Training

Describe how the agency ensures all information system users and managers are knowledgeable of security awareness material before authorizing access to the system.

- A) Document how information system users (managers, senior executives, and contractors) with access to FTI receive basic security awareness training as part of initial training for new users, when required by information system changes, and at least annually thereafter. Please describe the content of security awareness training.
- B) Document how the agency includes security awareness training on recognizing and reporting potential indicators of insider threat. (CE2)

Agency SSR Response:

The agency must ensure all information system users and managers are knowledgeable of security awareness material before authorizing access to the system. Security awareness content should include a basic understanding of the need for information security and user actions to maintain security and to respond to suspected security incidents. The content should also address awareness of the need for operations security. Security awareness techniques can include, for example: displaying posters, offering supplies inscribed with security reminders, generating email advisories/notices from senior organizational officials, displaying logon screen messages, and conducting information security awareness events.

See IRS Publication 1075 Section 9.3.2.2 (page 51) for further guidance.

IRS Response:

Insider threat training should bring awareness of the potential for individuals (e.g., employees, contractors, former employees) to use insider knowledge of sensitive agency information (e.g., security practices, systems that hold sensitive data) to perform malicious actions, which could include the unauthorized access or re-disclosure of FTI

9.3.2.3 AT-3: Role Based Security Training

Describe how the agency implements role-based security training.

A) Document how the agency provides role-based training to personnel with security roles and responsibilities before authorizing access to the information system or performing assigned duties that require access to FTI, when required by information system changes, and at least annually thereafter. Please describe the content of role-based security training.

Agency SSR Response:

The agency must identify personnel with significant information system security roles and responsibilities, document those roles and responsibilities and provide sufficient security training before authorizing access to the information system and FTI.

Comprehensive role-based training addresses management, operational, and technical roles and responsibilities covering physical, personnel, and technical safeguards and countermeasures. Such training can include for example: policies, procedures, tools, and artifacts for the organizational security roles defined. Agencies may also provide the training necessary for individuals to carry out their responsibilities related to operations and supply chain security within the context of organizational information security programs.

See IRS Publication 1075 Section 9.3.2.3 (page 52) for further guidance.

IRS Response:

9.3.2.4 AT-4: Security Training Records

Document how the agency monitors and maintains security training records.

- A) Describe how the agency documents and monitors individual information system security training activities including basic security awareness training and specific information system security training.
- B) Define the duration in which individual training records are retained.

 Per Publication 1075, the agency must retain individual training records for a period of five years.

Agency SSR Response:

The agency must document and monitor individual information system security training activities including basic security awareness training and specific information system security training.

See IRS Publication 1075 Section 9.3.2.4 (page 52) for further requirements and detail.

IRS Response:

9.3.3 Audit and Accountability (AU)

9.3.3.1 AU-1: Audit and Accountability Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) An audit and accountability policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.

 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Audit and accountability procedures to facilitate the policy and AU related security controls. Please include details regarding procedure review/update.
 - Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary audit and accountability policy and procedures.

See IRS Publication 1075 Section 9.3.3.1 (page 52) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.3.3 AU-2: Audit Events

Describe how the agency's information system(s) generate audit records for all security-relevant events. Security-relevant events must enable the detection of unauthorized access to FTI data. Auditing must be enabled to the greatest extent necessary to capture access, modification, deletion, and movement of FTI by each unique user. Access to FTI must be audited at the information system, operating system, software, and database levels.

- A) Document which event types are audited by the information system and all supporting components storing, processing, or transmitting FTI.
 - Per Publication 1075, at a minimum, the information system shall audit the following event types: Log onto the system, log off the system, change of password, all system administrator commands (while logged on as system administrator), switching accounts or running privileged actions from another account (e.g., Linux/Unix SU or Windows RUNAS), the creation or modification of super-user groups, subset of security administrator commands (while logged on in the security administrator role), subset of system administrator commands (while logged on in the user role), clearing of the audit log file, startup and shutdown of audit functions, use of identification and authentication mechanisms (e.g., user ID and password), change of file or user permissions or privileges (e.g., use of suid/guid,chown, su), remote access outside of the corporate network communication channels (e.g., modems, dedicated VPN) and all dial-in access to the system, changes made to an application or database by a batch file, application-critical record changes, changes to database or application records (where the application has been bypassed to produce the change [via a file or other database utility]), all system and data interactions concerning FTI, and any additional platform-specific events, as defined in SCSEMs located on the Office of Safeguards website.
- B) Document how the agency coordinates the security audit functions with other agency entities requiring audit-related information to enhance mutual support and to help guide the selection of auditable events.
- C) Provide a rationale for why the auditable events are deemed to be adequate to support after-the-fact investigations of security incidents.
- D) Document the duration in which the list of audited events is reviewed and updated. (CE3)

 Per Publication 1075, the agency must review and update the audited events at a minimum, annually.

Agency SSR Response:

The information system must generate audit records for all security-relevant events, including all security and system administrator accesses.

See IRS Publication 1075 Section 9.3.3.3 (pages 53-54) for further guidance.

Software and platforms have differing audit capabilities. Each individual platform audit capabilities and requirements are maintained on the platform-specific Office of Safeguards SCSEM, which is available on the IRS Office of Safeguards website.

IRS Response:	
IKS KESHOIISE.	
	: Content of Audit Records
A) Doc stor	now the agency's identified security-relevant events enable the detection of unauthorized access to FTI data. Cument the audit record content that is captured by the information system and all supporting components ring, processing, or transmitting FTI. Per Publication 1075, at a minimum, the agency must generate audit records containing information that establishes what type of event occurred, when the event occurred, where the event occurred, the source of the event, the outcome of the event, and the identity of any individuals or subjects associated with the event.
the	cument details of the agency's audit records (for all applicable components) that contain information to facilitate reconstruction of events if unauthorized activity or a malfunction occurs or is suspected in the audit records for lit events identified by type, location, or subject. (CE1)
Agency SSR Re	esponse:
Security-releva	ant events must enable the detection of unauthorized access to FTI data.
See IRS Publica	ation 1075 Section 9.3.3.4 (page 54) for further guidance.
IRS Response:	
mo nesponse.	
9.3.3.5 AU-4	: Audit Storage Capacity
Per Pu	now the agency configures information systems containing FTI to allocate sufficient audit record storage capacity. ublication 1075, the agency must allocate audit record storage capacity to retain audit records for the required retention period of seven years.
Agency SSR Re	esponse:
Agencies must auditable item	configure the information system to allocate sufficient audit record storage capacity to record all necessary is.
See IRS Publica	ation 1075 Section 9.3.3.5 (page 54) for further guidance.
IRS Response:	
9336 111-5	: Response to Audit Processing Failures
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- A) Document how the agency alerts designated agency officials in the event of an audit processing failure.
- B) Document how the agency monitors system operational status using operating system or system audit logs, and verifies functions and performance of the information system.
 - Logs shall be able to identify where system process failures have taken place and provide information relative to corrective actions to be taken by the system administrator.
- C) Document if and how automated warnings are provided when allocated audit record storage volume reaches (or exceeds) a maximum audit storage records capacity. (CE1)

Agency SSR Response:

Document different audit processing failures, and describe the method(s) in place for alerting designated agency officials of each failure. Audit processing failures include, for example, software/hardware errors, failures in the audit capturing mechanisms, and audit storage capacity being reached or exceeded. Agencies may choose to define additional actions for different audit processing failures (e.g., by type, by location, by severity, or a combination of such factors). This control applies to each audit data storage repository (i.e., distinct information system component where audit records are stored), the total audit storage capacity of organizations (i.e., all audit data storage repositories combined), or both.

See IRS Publication 1075 Section 9.3.3.6 (page 54) for further guidance.

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9.3.3.7 AU-6: Audit Review, Analysis, and Reporting

Describe how the agency reviews audit records for indications of unusual activities, suspicious activities or suspected violations.

- A) Define the frequency in which audit records are reviewed and analyzed.
 - Per Publication 1075, the agency must review and analyze information system audit records at least weekly or more frequently at the discretion of the information system owner for indications of unusual activity related to potential unauthorized FTI access.
- B) Document how findings are reported.

Per Publication 1075, findings shall be reported in accordance with the agency incident response policy; If the finding involves a potential unauthorized disclosure of FTI, the appropriate special agent-in-charge, Treasury Inspector General for Tax Administration (TIGTA), and the IRS Office of Safeguards must be contacted, as described in Section 10.0: *Reporting Improper Inspections or Disclosures*, of Publication 1075.

Refer to Table 8: Proactive Auditing Methods to Detect Unauthorized Access to FTI, of Publication 1075 for recommended proactive audit methods.

Agency SSR Response:

The agency must routinely (at least weekly) review audit records for indications of unusual activities, suspicious activities or suspected violations, and report findings to appropriate officials for prompt resolution.

See IRS Publication 1075 Section 9.3.3.7 (pages 54-55) for further requirements and detail.

9.3.3.8 AU-7: Audit Reduction and Report Generation

Describe how the agency's information system(s) provide an audit reduction and report generation capability to enable review of audit records.

- A) Document how the agency supports on-demand audit review, analysis, and reporting requirements and after-the-fact investigations of security incidents.
- B) Document how the agency ensures the original content or time ordering of audit records is not altered.

Agency SSR Response:

To enable review of audit records, the information system provides an audit reduction and report generation capability. Audit reduction is a process that manipulates collected audit information and organizes such information in a summary format that is more meaningful to analysts. Audit reduction and report generation capabilities do not always emanate from the same information system or from the same organizational entities conducting auditing activities. Audit reduction capability can include, for example, modern data mining techniques with advanced data filters to identify anomalous behavior in audit records. The report generation capability provided by the information system can generate customizable reports. Time ordering of audit records can be a significant issue if the granularity of the timestamp in the record is insufficient.

See IRS Publication 1075 Section 9.3.3.8 (page 55) for further guidance.

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9.3.3.9 AU-8: Time Stamps

Describe how the agency's information system(s) provides date and time stamps in audit record generation.

- A) Document if, and what internal system clocks are used to generate time stamps for audit records.
- B) Document how the agency records time stamps for audit records that can be mapped to Coordinated Universal Time (UTC) or Greenwich Mean Time (GMT).
- C) Document if the agency compares and synchronizes the internal information system clocks to approved authoritative time sources (e.g., NIST, Naval Observatory). (CE1)

Agency SSR Response:

The information system shall provide date and time stamps for use in audit record generation.

See IRS Publication 1075 Section 9.3.3.9 (page 56) for further guidance.

IRS Response	ponse:
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9.3.3.10 AU-9: Protection of Audit Information

Describe how the agency's information system(s) protects audit information.

- A) Document how the agency's information systems protect audit information and audit tools from unauthorized access, modification, and deletion.
- B) Document if, and how the agency authorizes access to manage audit functionality only to designated security administrator(s) or staff other than the system and network administrator. System and network administrators must not have the ability to modify or delete audit log entries. (CE4)

Agency SSR Response:

The information system protects audit information and audit tools from unauthorized access, modification, and deletion. Audit information includes all information (e.g., audit records, audit settings, and audit reports) needed to successfully audit information system activity. This control focuses on technical protection of audit information. Physical protection of audit information is addressed by media protection controls and physical and environmental protection controls

See IRS Publication 1075 Section 9.3.3.10 (page 56) for further guidance.

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IRS Response:
9.3.3.11 AU-11: Audit Record Retention
Describe how the agency ensures audit information is archived to provide support for after-the-fact investigations of security incidents and to meet regulatory and agency information retention requirements.
Per Publication 1075, the agency must retain audit records for 7 years.
Agency SSR Response:
To support the audit of activities, all agencies must ensure that audit information is archived for six years to enable the

See IRS Publication 1075 Section 9.3.3.11 (page 56) for further guidance.

IRS Response:

9.3.3.12 AU-12: Audit Generation

Describe the audit generation capabilities for the information system and all supporting components storing, processing, or transmitting FTI. Include how the information system:

- A) Provides audit generation capabilities for all auditable events defined in Section 9.3.3.2 (AU-2: Auditable Events).
- B) Allows designated agency officials to select which auditable events are to be audited by specific components of the information system.
- C) Generates audit records with the content defined in Section 9.3.3.4 (AU-3: Content of Audit Records).

recreation of computer-related accesses to both the operating system and to the application wherever FTI is stored.

Agency SSR Response:

Audit records can be generated from many different information system components. The list of audited events is the set of events for which audits are to be generated. These events are typically a subset of all events for which the information system is capable of generating audit records. Please document and include if the agency employ any automated tools to facilitate this process.

See IRS Publication 1075 Section 9.3.3.12 (pages 56-57) for further guidance.

IRS Response:

This requirement applies to outsourced data centers or cloud providers. The provider must be held accountable to protect and share audit information with the agency through the contract.

9.3.3.13 AU-16: Cross-Agency Auditing

Describe how the agency employs mechanisms for coordinating the access and protection of audit information among external entities when audit information is transmitted across agency boundaries.

• This requirement applies to outsourced data centers or cloud providers. The provider must be held accountable to protect and share audit information with the agency through the contract. Refer to Section 9.4.1, Cloud Computing Environments, and Section 5.4, Controls over Processing, of Publication 1075 for additional requirements.

Agency SSR Response:

The requirement should be accomplished through MOU's, SLA's and contractual agreements.

See IRS Publication 1075 Section 9.3.3.13 (page 58) for further guidance.

IRS Response:

9.3.4 Security Assessment and Authorization (CA)

9.3.4.1 CA-1: Security Assessment and Authorization Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A security assessment and authorization (SA&A) policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 - Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Security assessment and authorization procedures to facilitate the policy and CA related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Note: For federal agencies that receive FTI, a NIST compliant SA&A is required in accordance with FISMA. For state or local agencies that receive FTI, a third-party accreditation is not required. Instead these agencies may internally attest.

Agency SSR Response:

The agency shall develop and update a policy that addresses the processes used to test, validate, and authorize the security controls used to protect FTI.

See IRS Publication 1075 Section 9.3.4.1 (page 58) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.4.2 CA-2: Security Assessments

Describe how the agency conducts an assessment of the security controls in the information system to ensure the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security requirements for the system.

- A) Document how the agency develops and a security assessment plan that contains the scope of the assessment (selected security controls, applicable environments, and assessment roles and responsibilities), and assessment procedures.
- B) Document how the agency assesses security controls applicable to the information system and its environment to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting established security requirements.
 - Per Publication 1075, the agency must assess security controls at a minimum of an annual basis.
- C) Document if the agency produces a security assessment report that documents the results of the assessment.
- D) Document how the agency provides results to the agency's Authorizing Official.

Agency SSR Response:

The agency shall conduct an assessment of the security controls in the information system, periodically but at least annually, to ensure the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security requirements for the system. Security assessments: (i) ensure that information security is built into organizational information systems; (ii) identify weaknesses and deficiencies early in the development process; (iii) provide essential information needed to make risk-based decisions as part of security authorization processes; and (iv) ensure compliance to vulnerability mitigation procedures.

See IRS Publication 1075 Section 9.3.4.2 (pages 58-59) for further guidance.

IRS Resi	oonse:
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9.3.4.3 CA-3: System Interconnections

Describe how the agency protects and monitors information system interconnections.

- A) Document how the agency authorizes connections from the information system to other information systems through the use of Interconnection Security Agreements (ISA).
- B) Document the content of ISA language, including but not limited to: the interface characteristics, security requirements, and the nature of the information transmitted.
- Document how often the agency reviews and updates the system interconnections.
 Per Publication 1075, the agency must review and update the system interconnection on an annual basis.
- D) Describe how the agency employs a deny-all and allow-by-exception policy for allowing systems that receive, process, store, or transmit FTI to connect to external information systems. (CE5)

Agency SSR Response:

This control applies to dedicated connections between information systems (i.e., system interconnections) and does not apply to transitory, user-controlled connections such as email and website browsing. All external system connections must be supported by an ISA.

See IRS Publication 1075 Section 9.3.4.3 (page 60) for further guidance.

IRS Response:			
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9.3.4.4 CA-5: Plan of Action and Milestones

Describe how the agency develops and updates a Plan of Action & Milestones that identifies any deficiencies (identified in the agency Corrective Agency Plan [CAP], through security control assessments, and continuous monitoring activities) related to FTI processing.

- A) Document if the agency develops a POA&M for the information system to document the agency's planned remedial actions to correct weaknesses or deficiencies noted during the assessment of security controls (from CA-2: Security Assessment) and to reduce or eliminate known vulnerabilities in the system.
- B) Define the frequency in which the POA&M is reviewed and updated by the agency.

 Per Publication 1075, the agency must update the existing POA&M, at a minimum, on a quarterly basis.

The POA&M must comprise an all-inclusive tool or document for the agency to track vulnerabilities identified by the self-assessments, continuous monitoring activities, internal inspections, external audits and any other vulnerabilities identified for information systems that receive, process, store, or transmit FTI. Refer to Section 6.5, Plan of Action and Milestones, of Publication 1075 for additional information.

Agency SSR Response:

The agency shall develop and update a POA&M that shall identify any deficiencies related to FTI processing.

See IRS Publication 1075 Section 9.3.4.4 (page 60) for further guidance.

IRS Response:

9.3.4.5 CA-6: Security Authorization

Describe how owners of FTI authorize the security controls used to protect FTI before initiating operations. Include how the agency:

- A) Assigns a senior-level executive or manager as the authorizing official for the information system.
- B) Ensures that the authorizing official authorizes (through signature approval) the information system for processing before commencing operations.
- C) Updates the security authorization whenever there is a significant change to the system, or every three years, whichever occurs first.

Agency SSR Response:

The agency shall undergo a security assessment and authorization every three (3) years or whenever there is a significant change to the control structure. Authorizing official must be a senior level executive that's also an owner of the FTI data.

For systems processing FTI, IRS does not require third-party authorization of the security controls. The state may internally attest in writing that the security controls have been adequately implemented to protect FTI by having a senior agency official sign and approve the authorization.

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IRS Response:			

9.3.4.6 CA-7: Continuous Monitoring

Describe how the agency has developed an information security continuous monitoring (ISCM) strategy and program. The strategy shall include the following:

- A) Establishment of agency-defined metrics to be monitored on a regular basis.

 Per Publication 1075, agency defined metrics shall be monitored at least annually.
- B) Ongoing security control assessments in accordance with the agency continuous monitoring strategy.
- C) Ongoing security status monitoring of agency-defined metrics in accordance with the agency continuous monitoring strategy.

In accordance with the agency ISCM strategy, document how the agency conducts ongoing security control assessments within the information system(s) hosting FTI and facilitates ongoing security status monitoring of agency-defined metrics.

Agency SSR Response:

The agency shall periodically, at least annually, monitor the security controls within the information system hosting FTI to ensure that the controls are operating, as intended. Continuous monitoring programs facilitate ongoing awareness of threats, vulnerabilities, and information security to support organizational risk management decisions. The terms continuous and ongoing imply that organizations assess/analyze security controls and information security-related risks at a frequency sufficient to support organizational risk-based decisions. The results of continuous monitoring programs generate appropriate risk response actions by organizations.

If/where possible, automation supports more frequent updates to security authorization packages, hardware/software/firmware inventories, and other system information. Effectiveness is further enhanced when continuous monitoring outputs are formatted to provide information that is specific, measurable, actionable, relevant, and timely

See IRS Publication 1075 Section 9.3.4.6 (page 61) for further guidance.

IRS Response:

9.3.5 Configuration Management (CM)

9.3.5.1 CM-1: Configuration Management Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A configuration management policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.

 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Configuration management procedures to facilitate the policy and CM related security controls. Please include details regarding procedure review/update.
 - Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must ensure that configuration management policy and procedures must be developed, documented, disseminated and updated as necessary to facilitate implementing configuration management security controls.

See IRS Publication 1075 Section 9.3.5.1 (page 61) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.5.2 CM-2: Baseline Configuration

Describe how the agency develops and maintains a baseline configuration for information system components.

- A) Document how the agency develops, documents, and maintains under configuration controls, a current baseline configuration of the information system.
- B) Document the agency's frequency of review and update of the baseline configuration of the information system. (CE1)

Per Publication 1075, the agency must review or update the baseline, at a minimum, annually; when required due to system upgrades, patches, or other significant changes; and as an integral part of information system component installations and upgrades.

The Office of Safeguards recommends using SCSEMs provided on the Office of Safeguards website for developing an information system baseline configuration.

Agency SSR Response:

The agency must develop, document, and maintain a current baseline configuration of the information system. Baseline configurations serve as a basis for future builds, releases, and/or changes to information systems. Baseline configurations include information about information system components (e.g., standard software packages installed on workstations, notebook computers, servers, network components, or mobile devices; current version numbers and patch information on operating systems and applications; and configuration settings/parameters), network topology, and the logical placement of those components within the system architecture.

See IRS Publication 1075 Section 9.3.5.2 (page 61) for further guidance.

IRS Response:		

9.3.5.3 CM-3: Configuration Change Control

Describe how the agency authorizes, documents, and controls changes to the information system. Include how the agency addresses:

- A) Determines the types of changes to the information system that are configuration controlled.
- B) Reviews proposed configuration-controlled changes to the information system; and approves or disapproves such changes with explicit consideration for security impact analyses.
- C) Documents configuration change decisions associated with the information system.
- D) Implements approved configuration-controlled changes to the information system.
- E) Retains records of configuration-controlled changes to the information system for the life of the system.
- F) Audits and reviews activities associated with configuration-controlled changes to the information system.
- G) Coordinates and provides oversight for configuration change control activities through a Configuration Control Board that convenes when configuration changes occur.
- H) Tests, validates, and documents changes to the information system before implementing the changes on the operational system. (CE2)

Agency SSR Response:

The agency must have a designated individual(s) to authorize, document, and control changes to the information system.

- Describe whether or not the agency has a formal Change Control Board

Configuration change controls for agency information systems and component should involve the systematic proposal, justification, implementation, testing, review, and disposition of changes to the systems, including system upgrades and modifications. Configuration change control includes changes to baseline configurations for components and configuration items of information systems, changes to configuration settings for information technology products (e.g., operating systems, applications, firewalls, routers, and mobile devices), unscheduled/unauthorized changes, and changes to remediate vulnerabilities. Typical processes for managing configuration changes to information systems include, for example, Configuration Control Boards that approve proposed changes to systems. For new development information systems or systems undergoing major upgrades, organizations consider including representatives from development organizations on the Configuration Control Boards. Auditing of changes includes activities before and after changes are made to organizational information systems and the auditing activities required to implement such changes.

See IRS Publication 1075 Section 9.3.5.3 (page 62) for further guidance.

IRS Resi	oonse:
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9.3.5.4 CM-4: Security Impact Analysis

Describe how the agency analyzes changes to the information system to determine potential security impacts prior to change implementation.

Agency SSR Response:

The agency must monitor changes to the information system conducting security impact analysis to determine the effects of the changes. Individuals conducting security impact analyses possess the necessary skills/technical expertise to analyze the changes to information systems and the associated security ramifications. Security impact analysis may include, for example, reviewing security plans to understand security control requirements and reviewing system design documentation to understand control implementation and how specific changes might affect the controls. Security impact analyses may also include assessments of risk to better understand the impact of the changes and to determine if additional security controls are required.

See IRS Publication 1075 Section 9.3.5.4 (page 62) for further guidance.

IRS Response:

9.3.5.5 CM-5: Access Restrictions for Change

Describe how the agency defines, documents, approved, and enforces physical and logical access restrictions associated with changes to the information system.

Agency SSR Response:

The agency must approve individual access privileges and enforces physical and logical access restrictions associated with changes to the information system and generates, retains, and reviews records reflecting all such changes.

Any changes to the hardware, software, and/or firmware components of information systems can potentially have significant effects on the overall security of the systems. Therefore, agencies should permit only qualified and authorized individuals to access information systems for purposes of initiating changes, including upgrades and modifications. Agencies should maintain records of access to ensure that configuration change control is implemented and to support after-the-fact actions should organizations discover any unauthorized changes. Access restrictions for change also include software libraries. Access restrictions include, for example, physical and logical access controls (see AC-3 and PE-3), workflow automation, media libraries, abstract layers (e.g., changes implemented into third-party interfaces rather than directly into information systems), and change windows (e.g., changes occur only during specified times, making unauthorized changes easy to discover).

See IRS Publication 1075 Section 9.3.5.5 (page 62) for further guidance.

IRS Response:

9.3.5.6 CM-6: Configuration Settings

Describe how the agency establishes configuration settings and monitors agency compliance. Include how the agency:

- A) Establishes and documents configuration settings for IT products that receive, process, store, or transmit FTI using Office of Safeguards—approved compliance requirements (e.g., SCSEMs, assessment tools) that reflect the most restrictive mode consistent with operational requirements.
- B) Implements the configuration settings.
- C) Identifies, documents, and approves any deviations from established configuration settings for information systems that receive, process, store, or transmit FTI.
- D) Monitors and controls changes to the configuration settings in accordance with agency policies and procedures.

Note: The authoritative source for platform checklists used by the Office of Safeguards is the NIST Checklist Program Repository (http://checklists.nist.gov).

Agency SSR Response:

The agency shall establish mandatory configuration settings for information technology products employed within the information system, which (i) configures the security settings of information technology products to the most restrictive mode consistent with operational requirement; (ii) documents the configuration settings; and (iii) enforces the configuration settings in all components of the information system.

See IRS Publication 1075 Section 9.3.5.6 (pages 62-63) for further guidance.

Office of Safeguards SCSEMs may include compliance requirements from one or more of the following security benchmarks:

- United States Government Configuration Baseline (USGCB)
- Center for Internet Security (CIS) Benchmarks
- Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGS)
- National Security Agency (NSA) Configuration Guides

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IRS Response:		

9.3.5.7 CM-7: Least Functionality

Describe how the agency implements least functionality in its information systems. Include how the agency:

- A) Configures the information system to provide only essential capabilities.
- B) Prohibits or restricts the use of the functions, ports, protocols, or services as defined in Office of Safeguards—approved compliance requirements (e.g., SCSEMs, assessment tools).
- C) Reviews the information system as part of vulnerability assessments to identify unnecessary or non-secure functions, ports, protocols, and services (see Section 9.3.14.3, Vulnerability Scanning (RA-5), of Publication 1075).
- D) Disables defined functions, ports, protocols, and services within the information system deemed to be unnecessary or non-secure.

Agency SSR Response:

The agency shall restrict access for change, configuration settings, and provide the least functionality necessary. Some IT component functions and services, provided by default, may not be necessary to support essential agency operations (e.g., key missions, functions). Additionally, it is sometimes convenient to provide multiple services from single information system components, but doing so increases risk over limiting the services provided by any one component. Where feasible, the agency should limit component functionality to a single function per device (e.g., email servers or web servers, but not both). Agencies can utilize network scanning tools, intrusion detection and prevention systems, and end-point protections such as firewalls and host-based intrusion detection systems to identify and prevent the use of prohibited functions, ports, protocols, and services.

See IRS Publication 1075 Section 9.3.5.7 (page 63) for further guidance.

IRS	Res	po	ns	e:

9.3.5.8 CM-8: Information System Component Inventory

Describe how the agency develops and maintains an inventory of information system components.

- A) Document how the agency develops and documents an inventory of information system components that: accurately reflects the current information system; includes all components that store, process, or transmit FTI; is at the level of granularity deemed necessary for tracking and reporting; and includes information deemed necessary to achieve effective information system component accountability.
- B) Document how the agency reviews and updates the information system component inventory through periodic manual inventory checks or a network monitoring tool that automatically maintains the inventory.
- C) Document how the agency updates the inventory of information system components as an integral part of component installations, removals, and information system updates. (CE1)

Additional requirements for maintaining a system component inventory are provided in Section 9.4.12, System Component Inventory, of Publication 1075.

Agency SSR Response:

The agency shall develop, document, and maintain a current inventory of the components of the information system and relevant ownership information. Information deemed necessary for effective accountability of information system components includes, for example: hardware inventory specifications, software license information, software version numbers, component owners, and for networked components or devices, machine names and network addresses. Inventory specifications include, for example: manufacturer, device type, model, serial number, and physical location.

See IRS Publication 1075 Section 9.3.5.8 (pages 63-64) for further guidance.

IRS Response:

Additional guidance can be found in NIST SP 800-70 Security Configuration Checklists Program for IT Products- Guidance for Checklists Users and Developers

9.3.5.9 CM-9: Configuration Management Plan

Describe how the agency develops, documents, and implements a configuration management plan (CMP) for the information system. The CMP shall:

- Address roles, responsibilities, and configuration management processes and procedures,
- Establish a process for identifying configuration items throughout the system development life cycle (SDLC) and for managing the configuration of the configuration items,
- Define the configuration items for the information system and places the configuration items under configuration management, and
- Be protected from unauthorized disclosure and modification.

Agency SSR Response:

Configuration management plans satisfy the requirements in configuration management policies while being tailored to individual information systems. Such plans define detailed processes and procedures for how configuration management is used to support system development life cycle activities at the information system level. Configuration management plans are typically developed during the development/acquisition phase of the system development life cycle. The plans describe how to move changes through change management processes, how to update configuration settings and baselines, how to maintain information system component inventories, how to control development, test, and operational environments, and how to develop, release, and update key documents.

See IRS Publication 1075 Section 9.3.5.9 (page 64) for further guidance.

IRS Response:		

9.3.5.10 CM-10: Software Usage Restrictions

Describe how the agency establishes and monitors software usage restrictions. Include how the agency:

- A) Uses software and associated documentation in accordance with contract agreements and copyright laws.
- B) Tracks the use of software and associated documentation protected by quantity licenses to control copying and distribution.
- C) Controls and documents the use of peer-to-peer file sharing technology to ensure that this capability is not used for the unauthorized distribution, display, performance, or reproduction of copyrighted work.
- D) Establishes restrictions on the use of open source software. Open source software must be: legally licensed; approved by the agency IT department; and adhere to a secure configuration baseline checklist from the U.S. Government or industry. (CE1)

Agency SSR Response:

Software license tracking can be accomplished by manual methods (e.g., simple spreadsheets) or automated methods (e.g., specialized tracking applications) depending on agency needs.

See IRS Publication 1075 Section 9.3.5.10 (page 64) for further guidance.

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9.3.5.11 CM-11: User-Installed Software

Describe how the agency addresses and monitors the installation of software by users.

- A) Document the policies the agency has established to govern the installation of software by users.
- B) Describe how the agency enforces software installation policies through automated methods.
- C) Describe how the agency monitors policy compliance on a continual basis.

Agency SSR Response:

If provided the necessary privileges, users have the ability to install software in organizational information systems. To maintain control over the types of software installed, organizations identify permitted and prohibited actions regarding software installation. Permitted software installations may include, for example, updates and security patches to existing software and downloading applications from organization-approved "app stores." Prohibited software installations may include, for example, software with unknown or suspect pedigrees or software that organizations consider potentially malicious. Policy enforcement methods include procedural methods (e.g., periodic examination of user accounts), automated methods (e.g., configuration settings implemented on organizational information systems), or both.

See IRS Publication 1075 Section 9.3.5.11 (page 64) for further guidance.

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9.3.6 Contingency Planning (CP)

9.3.6.1 CP-1: Contingency Planning Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A contingency planning policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Contingency planning procedures to facilitate the policy and CP related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Note: All FTI that is transmitted to agencies is backed up and protected within IRS facilities. As such, the focus of contingency planning controls is on the protection of FTI stored in agency owned or managed backup media or used at alternative facilities and not focused on the availability of data. If FTI is included in contingency planning – policy and procedures must be developed, documented, disseminated, and updated as necessary to facilitate implementing contingency planning security controls.

Agency SSR Response:

The agency must develop applicable contingencies for ensuring that FTI is available, based upon their individual risk-based approaches. If FTI is included in contingency planning; policy and procedures must be developed, documented, disseminated, and updated as necessary to facilitate implementing contingency planning security controls.

See IRS Publication 1075 Section 9.3.6.1 (page 65) for further guidance.

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

IRS Response:

9.3.6.2 CP-2: Contingency Plan

If FTI is included in contingency planning, describe how the agency develops and maintains a contingency plan for the information system. The contingency plan shall:

- Identify essential missions and business functions and associated contingency requirements;
- Provide recovery objectives, restoration priorities, and metrics;
- Address contingency roles, responsibilities, and assigned individuals with contact information;
- Address maintaining essential missions and business functions despite an information system disruption, compromise, or failure;
- Address eventual, full information system restoration without deterioration of the security safeguards originally planned and implemented;
- Be reviewed and approved by designated agency officials;
- Be distributed to key contingency personnel;
- Be coordinated with incident handling activities;
- Be reviewed at least annually;
- Be updated to address changes to the agency, information system, or environment of operation and problems encountered during contingency plan implementation, execution, or testing. Changes shall be communicated to key contingency personnel; and
- Be protected from unauthorized disclosure and modification.

Agency SSR Response:

Contingency planning for information systems is part of an overall agency program for achieving continuity of operations for mission/business functions. Contingency planning addresses both information system restoration and implementation of alternative mission/business processes when systems are compromised. The effectiveness of contingency planning is maximized by considering such planning throughout the phases of the system development life cycle. Performing contingency planning on hardware, software, and firmware development can be an effective means of achieving information system resiliency.

Contingency plans should reflect the degree of restoration required for agency information systems since not all systems may need to fully recover to achieve the level of continuity of operations desired. In addition to information system availability, contingency plans also address other security-related events resulting in a reduction in mission and/or business effectiveness, such as malicious attacks compromising the confidentiality or integrity of information systems. Actions addressed in contingency plans include, for example, orderly/graceful degradation, information system shutdown, fallback to a manual mode, alternate information flows, and operating in modes reserved for when systems are under attack. By closely coordinating contingency planning with incident handling activities, agencies can ensure that the necessary contingency planning activities are in place and activated in the event of a security incident

See IRS Publication 1075 Section 9.3.6.2 (pages 65-66) for further guidance.

IRS	Res	ะทด	nse:

9.3.6.3 CP-3: Contingency Training

Describe how personnel are trained in their contingency roles and responsibilities with respect to the information system. Per Publication 1075, testing shall occur prior to assuming a contingency role or responsibility, when required by information system changes, and annually thereafter.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.6.3 (page 66) for further guidance.

IRS	Res	po	ns	e:
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9.3.6.4 CP-4: Contingency Plan Testing

Describe how the agency tests contingency plans to determine the effectiveness of the plan and the agency's readiness to execute the plan.

- A) Document how the agency tests the contingency plan for the information system, and define the frequency. Per Publication 1075, the agency shall test the contingency plan, at a minimum, annually.
- B) Document how the agency reviews contingency plan test results.
- C) Document how the agency initiates corrective actions, if/when needed.

Agency SSR Response:

The agency must ensure that plans are periodically tested (at a minimum annually) to ensure procedures and staff personnel are able to provide recovery capabilities within established timeframes. Methods for testing contingency plans to determine the effectiveness of the

plans and to identify potential weaknesses in the plans include, for example, walk-through and tabletop exercises, checklists, simulations (parallel, full interrupt), and comprehensive exercises

See IRS Publication 1075 Section 9.3.6.4 (page 66) for further guidance.

IRS Response:

9.3.6.5 CP-6: Alternate Storage Site

Describe how the agency identifies alternate storage sites.

- A) Document how the agency establishes necessary agreements to permit the secure storage and retrieval of information system and FTI backups.
- B) Document how the agency ensures the alternate storage site provides information security safeguards that meet the minimum protection standards and the disclosure provisions of IRC 6103.

Agency SSR Response:

The agency must identify alternate storage sites and initiate necessary agreements to permit the secure storage of information system and FTI backups. Alternate storage sites are sites that are geographically distinct from primary storage sites. An alternate storage site maintains duplicate copies of information and data in the event that the primary storage site is not available. Items covered by alternate storage site agreements include, for example, environmental conditions at alternate sites, access rules, physical and environmental protection requirements, and coordination of delivery/retrieval of backup media. Alternate storage sites reflect the requirements in contingency plans so that organizations can maintain essential missions/business functions despite disruption, compromise, or failure in agency information systems.

See IRS Publication 1075 Section 9.3.6.5 (page 66) for further guidance.

IRS Response:

9.3.6.6 CP-7: Alternate Processing Site

Describe how the agency identifies alternate processing sites.

- A) Describe how the agency establishes an alternate processing site, including necessary agreements to permit the transfer and resumption of information system operations, in accordance with the agency's contingency plan when the primary processing capabilities are unavailable.
- B) Describe how the agency ensures equipment and supplies required to transfer and resume operations are available at the alternate processing site or contracts are in place to support delivery to the site within the agency-defined time period for transfer/resumption.
- C) Document how the agency ensures the alternate processing site provides information security safeguards that meet the minimum protection standards and the disclosure provisions of IRC 6103.

Agency SSR Response:

The agency must identify alternate processing sites and/or telecommunications capabilities, and initiate necessary agreements to facilitate secure resumption of information systems used to process, store and transmit FTI if the primary processing site and/or primary telecommunications capabilities become unavailable. Alternate processing sites are sites that are geographically distinct from primary processing sites. An alternate processing site provides processing capability in the event that the primary processing site is not available. Items covered by alternate processing site agreements include, for example, environmental conditions at alternate sites, access rules, physical and environmental protection requirements, and coordination for the transfer/assignment of personnel. Requirements are specifically allocated to alternate processing sites that reflect the requirements in contingency plans to maintain essential missions/business functions despite disruption, compromise, or failure in agency information systems.

See IRS Publication 1075 Section 9.3.6.6 (pages 66-67) for further guidance.

RS Response

9.3.6.7 CP-9: Information System Backup

Describe how the agency conducts and protect information system backups containing FTI.

- A) Document how the agency conducts backups of user-level information, system-level information, and security-related documentation consistent with the defined frequency in the agency's contingency plan.
- B) Document how the agency protects the confidentiality of backup information at storage locations pursuant to IRC 6103 requirements.

Agency SSR Response:

System-level information includes, for example, system-state information, operating system and application software, and licenses. User-level information includes any information other than system-level information. Mechanisms employed by organizations to protect the integrity of information system backups include, for example, digital signatures and cryptographic hashes. Protection of system backup information while in transit is beyond the scope of this control. Information system backups reflect the requirements in contingency plans as well as other agency requirements for backing up information.

See IRS Publication 1075 Section 9.3.6.7 (page 67) for further guidance.

IRS Respo	onse:
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9.3.6.8 CP-10: Information System Recovery and Reconstitution

Describe how the agency provides and enables the recovery and reconstitution of the information system to a known state after a disruption, compromise, or failure.

Agency SSR Response:

Recovery is executing information system contingency plan activities to restore organizational missions/business functions. Reconstitution takes place following recovery and includes activities for returning organizational information systems to fully operational states. Recovery and reconstitution operations reflect mission and business priorities, recovery point/time and reconstitution objectives, and established organizational metrics consistent with contingency plan requirements. Reconstitution includes the deactivation of any interim information system capabilities that may have been needed during recovery operations. Reconstitution also includes assessments of fully restored information system capabilities, reestablishment of continuous monitoring activities, potential information system reauthorizations, and activities to prepare the systems against future disruptions, compromises, or failures. Recovery/reconstitution capabilities employed by organizations can include both automated mechanisms and manual procedures.

See IRS Publication 1075 Section 9.3.6.8 (page 67) for further guidance.

IRS Response:

9.3.7 Identification and Authentication (IA)

9.3.7.1 IA-1: Identification and Authentication Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) An identification and authentication policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 - Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Identification and authentication procedures to facilitate the policy and IA related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary identification and authentication policy and procedures to facilitate implementing identification and authentication security controls.

See IRS Publication 1075 Section 9.3.7.1 (page 67) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.7.2 IA-2: Identification and Authentication (Organizational Users)

Describe how the agency identifies and authenticates organizational users accessing FTI.

- A) Document how the agency uniquely identifies and authenticates organizational/agency users (or processes acting on behalf of agency users).
- B) Document if, and how the agency implements multi-factor authentication for all remote network access to privileged and non-privileged accounts for information systems that receive, process, store, or transmit FTI. (CE1, CE2)
- C) Document if, and how the agency implements multi-factor authentication for remote access to privileged and non-privileged accounts such that one of the factors is provided by a device separate from the system gaining access. NIST SP 800-63 allows the use of software tokens. (CE11)

Agency SSR Response:

The information system must be configured to uniquely identify users, devices, and processes via the assignment of unique user accounts and validate users (or processes acting on behalf of users) using standard authentication methods such as passwords, tokens, smart cards, or biometrics.

See IRS Publication 1075 Section 9.3.7.2 (pages 67-68) for further guidance.

IRS Response:

Organizational users include agency employees or individuals the agency has deemed to have equivalent status of employees (e.g., contractors). This control applies to all accesses other than: (i) accesses that are explicitly identified and documented in AC-14; and (ii) accesses that occur through authorized use of group authenticators without individual authentication

9.3.7.3 IA-3: Device Identification and Authentication

Describe how the agency uniquely identifies and authenticates devices before establishing a connection.

Agency SSR Response:

Organizational devices requiring unique device-to-device identification and authentication may be defined by type, by device, or by a combination of type/device. Information systems typically use either shared known information (e.g., Media Access Control [MAC] or Transmission Control Protocol/Internet Protocol [TCP/IP] addresses) for device identification or organizational authentication solutions (e.g., IEEE 802.1x and Extensible Authentication Protocol [EAP], Radius server with EAP-Transport Layer Security [TLS] authentication, Kerberos) to identify/authenticate devices on local and/or wide area networks.

See IRS Publication 1075 Section 9.3.7.3 (page 68) for further guidance.

IRS Response:

9.3.7.4 IA-4: Identifier Management

Describe how the agency manages user accounts and information system identifiers.

- A) Describe how the agency requests and receives authorization from designated agency officials to assign an individual, group, role, or device identifier.
- B) Describe how the agency selects an identifier that identifies an individual, group, role, or device.
- C) Describe how the agency assigns the identifier to the intended individual, group, role, or device.
- D) Describe how the agency prevents reuse of identifiers.
- E) Describe if, and how the agency disables information system identifiers after a period of user inactivity. Per Publication 1075, the agency must disable the identifier after 120 days of user inactivity.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.7.4 (page 68) for further guidance.

IRS Response:

9.3.7.5 IA-5: Authenticator Management

Describe how the agency manages information system authenticators (or passwords). Describe how the agency implements the following authenticator requirements:

- A) Verifies, as part of the initial authenticator distribution, the identity of the individual, group, role, or device receiving the authenticator.
- B) Establishes initial authenticator content for authenticators defined by the agency.
- C) Ensures authenticators have sufficient strength of mechanism for their intended use.
- D) Establishes and implements administrative procedure(s) for initial authenticator distribution, for lost/compromised or damaged authenticators, and for revoking authenticators.
- E) Changes default content of authenticators prior to information system installation.
- F) Establishes minimum and maximum lifetime restrictions and reuse conditions for authenticators.
- G) Changes/refreshes authenticators on a regular basis (include frequency in agency response).
- H) Protects authenticator content from unauthorized disclosure and modification.
- I) Requires individuals to take, and having devices implement, specific security safeguards to protect authenticators.
- J) Changes authenticators for group/role accounts when membership to those accounts changes.
- K) Describe how the information system, for password-based authentication: enforces minimum password complexity of: 8 characters; at least one numeric and at least one special character; mixture of at least one uppercase and at least one lowercase letter; and stores and transmits only encrypted representations of passwords.
- L) Enforces password minimum lifetime restriction of one day.
- M) Enforces non-privileged account passwords to be changed at least every 90 days.
- N) Enforces privileged account passwords to be changed at least every 60 days.
- O) Prohibits password reuse for 24 generations.
- P) Allows the use of a temporary password for system logons requiring an immediate change to a permanent password.
- Q) Password-protects system initialization (boot) settings.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.7.5 (pages 68-69) for further guidance.

IRS Response:

9.3.7.6 IA-6: Authenticator Feedback

Describe how the agency's information system(s) obscures feedback of authentication information during the authentication process to protect the information from possible exploitation/use by unauthorized individuals.

Agency SSR Response:

The information system obscures feedback of authentication information during the authentication process to protect the information from possible exploitation/use by unauthorized individuals.

See IRS Publication 1075 Section 9.3.7.6 (page 69) for further guidance.

IRS Response:	
9.3.7.7 IA-7: Cryptographic Module Authentication	
Describe how the agency ensures cryptographic modules are complian	nt with NIST guidance, including FIPS 140-2
compliance.	, ,
Per Publication 1075, the information system must implement me module that meet the requirements of applicable federal laws, Ex standards, and guidance for such authentication. Validation provicryptography to protect FTI, the encryption functions have been each all electronic transmissions of FTI must be encrypted using FIPS 14	ecutive Orders, directives, policies, regulations, ides assurance that when agency implements examined in detail and will operate as intended.
does not meet the FIPS 140-2 requirements by simply implementi tested and validated to FIPS 140-2 meet the applicability requirem information. NIST maintains a list of validated cryptographic mod	ng an approved security function. Only modules nents for cryptographic modules to protect sensitive
Agency SSR Response:	
The agency shall work to ensure these modules are compliant with NIST guagencies are employing cryptographic modules	uidance, including FIPS 140-2 compliance whenever
See IRS Publication 1075 Section 9.3.7.7 (page 69) for further guidance.	
IRS Response:	
9.3.7.8 IA-8: Identification and Authentication (Non-Organizationa	-
Describe how the agency uniquely identifies and authenticates non-ag agency users).	ency users (or processes acting on behalf of non-
262.167 212.167	
Agency SSR Response:	Non-organizational users include information
See IRS Publication 1075 Section 9.3.7.8 (page 69) for further guidance.	system users other than organizational users explicitly covered by IA-2
IRS Response:	
9.3.8 Incident Respon	so (IP)
9.5.8 incluent kespon	se (in)
Incident response controls here are specific to incidents that invol FTI	ve

9.3.8.1 IR-1: Incident Response Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) An incident response policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Incident response procedures to facilitate the policy and IR related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary incident response policy and procedures.

See IRS Publication 1075 Section 9.3.8.1 (page 70) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.8.2 IR-2: Incident Response Training

Describe how the agency trains personnel with access to FTI, including contractors and consolidated data center employees if applicable, in their incident response roles on the information system and FTI. Document if, and how the agency provides incident response training to information system users consistent with assigned roles and responsibilities. In your response please document if incident response training occurs:

- A) Prior to assuming an incident response role or responsibility;
- B) When required by information system changes; and
- C) Annually thereafter.

Agency SSR Response:

The agency must train personnel in their incident response roles on the information system and FTI. Incident response training must provide individuals with an understanding of incident handling capabilities for security events, including preparation, detection and analysis, containment, eradication, and recovery.

See IRS Publication 1075 Section 9.3.8.2 (page 70) for further guidance.

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IRS Response:			

9.3.8.3 IR-3: Incident Response Testing

Describe how the agency tests and/or exercises the incident response capability for the information system on at least an annual basis.

- A) Describe how the agency performs tabletop exercises using scenarios that include a breach of FTI, and tests the agency's incident response policies and procedures.
- B) Document if all employees and contractors with significant FTI incident response capabilities, including technical personnel responsible for maintaining consolidated data centers and off-site storage, are included in tabletop exercises.
- C) Describe how the agency produces an after-action report for each tabletop exercise to improve existing processes, procedures, and policies.

Refer to Section 10.3, Incident Response Procedures, for specific instructions on incident response requirements where FTI is involved.

Agency SSR Response:

The agency shall test and/or exercise the incident response capability for the information system at least annually to determine the incident response effectiveness and documents the results. Incident response testing includes, for example, the use of checklists, walk-through or tabletop exercises, simulations (parallel/full interrupt), and comprehensive exercises. Incident response testing can also include a determination of the effects on organizational operations (e.g., reduction in mission capabilities), organizational assets, and individuals due to incident response.

See IRS Publication 1075 Section 9.3.8.3 (page 70) for further guidance.

IRS Response:

9.3.8.4 IR-4: Incident Handling

Describe how the agency implements an incident handling capability. Document how the agency conducts the following:

- A) Implements an incident handling capability for security incidents that includes preparation, detection and analysis, containment, eradication, and recovery;
- B) Coordinates incident handling activities with contingency planning activities; and
- C) Incorporates lessons learned from ongoing incident handling activities into incident response procedures, training, and testing/exercises, and implement the resulting changes accordingly.

Agency SSR Response:

The agency must routinely track and document information system security incidents potentially affecting the confidentiality of FTI.

See IRS Publication 1075 Section 9.3.8.4 (page 71) for further guidance.

IRS Response:

9.3.8.5 IR-5: Incident Monitoring

Describe how the agency routinely tracks and documents all physical and information system security incidents potentially affecting the confidentiality of FTI.

Agency SSR Response:

The agency must promptly report incident information to the appropriate Agent-in-Charge, TIGTA, any time there is a compromise to FTI.

See IRS Publication 1075 Section 9.3.8.5 (page 71) for further guidance.

IRS Response:

9.3.8.6 IR-6: Incident Reporting

Describe the agency's policy to report incidents when there is a compromise to FTI. Document how the agency conducts the following:

- A) Requires personnel to report suspected security incidents to internal agency incident response resources upon discovery of the incident.
- B) Contacts the appropriate special agent-in-charge, TIGTA, and the IRS Office of Safeguards immediately but no later than 24 hours after identification of a possible issue involving FTI.

Please refer to Section 10: Reporting Improper Inspections or Disclosures, for more information on incident reporting requirements required by the Office of Safeguards.

Agency SSR Response:

The agency shall also provide an incident response support resource that offers advice and assistance to users of the information system for the handling and reporting of security incidents. The support resource is an integral part of the agency's incident response capability.

Incidents involving FTI are required to be reported to TIGTA and to IRS within 24 hours of discovery of the incident. This should be written into the agency's incident response plan.

See IRS Publication 1075 Section 9.3.8.6 (page 71) for further guidance.

IRS Response:

9.3.8.7 IR-7: Incident Response Assistance

Describe how the agency provides an incident response support resource (e.g. help desk) that offers advice and assistance to users of the information system containing FTI and/or users with physical access to FTI. Describe how the support resource is an integral part of the agency's incident response capability.

Agency SSR Response:

Incident response support resources provided by organizations include, for example, help desks, assistance groups, and access to forensics services, when required.

See IRS Publication 1075 Section 9.3.8.7 (page 71) for further guidance.

[Agency code] Sateguard Security Report [Year]
IRS Response:
9.3.8.8 IR-8: Incident Response Plan
Describe how the agency develops and maintains an Incident Response Plan (IRP). Please include how the agency:
A) Develops and maintains an incident response plan that:
 Provides the agency with a roadmap for implementing its incident response capability;
 Describes the structure of the incident response capability;
 Provides a high-level approach for how the incident response capability fits into the overall agency;
 Meets the unique requirements of the agency, which related to mission, size, structure, and functions;

- Defines reportable incidents;
- Provides metrics for measuring the incident response capability within the agency;
- Defines the resources and management support needed to effectively maintain and mature an incident response capability; and
- Ensures the document is reviewed and approved by designated agency officials.
- B) Distributes to authorized incident response personnel and protected from unauthorized disclosure and modification.
- C) Reviews the IRP, at a minimum, on an annual basis or as an after-action review.
- D) Updates the IRP to address system/agency changes or problems encountered during plan implementation, execution, or testing.
- E) Communicates IRP changes to authorized incident response personnel.
- F) Protects the IRP from unauthorized disclosure and modification.

Agency S	SR Res	ponse:
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	See IRS Publication	1075 Section 9.3.8.8 (pages 71-72) for further g	uidance.
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IRS Response:

9.3.8.9 IR-9: Information Spillage Response

Describe how the agency responds to information spills. Include how the agency:

- A) Identifies the specific information involved in the information system contamination.
- B) Alerts authorized incident response personnel of the information spill using a method of communication not associated with the spill.
- C) Isolates the contaminated information system or system component.
- D) Eradicates the information from the contaminated information system or component.
- E) Identifies other information systems or system components that may have been subsequently contaminated.

Agency SSR Response:

Information spillage refers to instances where either classified or sensitive information is inadvertently placed on information systems that are not authorized to process such information. Such information spills often occur when information that is initially thought to be of lower sensitivity is transmitted to an information system and then is subsequently determined to be of higher sensitivity. At that point, corrective action is required.

See IRS Publication 1075 Section 9.3.8.9 (page 72) for further guidance.

9.3.9 Maintenance (MA)

9.3.9.1 MA-1: System Maintenance Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A system maintenance policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) System maintenance procedures to facilitate the policy and MA related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency shall develop, document, disseminate, and update as necessary Maintenance policy and procedures

See IRS Publication 1075 Section 9.3.9.1 (pages 72-73) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.9.2 MA-2: Controlled Maintenance

Describe how the agency ensures system maintenance is scheduled, performed, and documented.

- A) Describe how the agency schedules, performs, documents, and reviews records of maintenance and repairs on information system components of the information system in accordance with manufacturer or vendor specifications and agency requirements.
- B) Describe how the agency approves and monitors all maintenance activities, whether performed on site or remotely and whether the equipment is serviced on site or removed to another location.
- C) Describe how the agency requires designated agency officials to explicitly approve the removal of the information system or system components from agency facilities for off-site maintenance or repairs.
- D) Describe how the agency sanitizes equipment to remove all FTI from associated media prior to removal from agency facilities for off-site maintenance or repairs.
- E) Describe how the agency checks and confirms the implementation of potentially impacted security controls to verify that the controls are still functioning properly following maintenance or repair actions and update agency maintenance records accordingly.

Agency SSR Response:

The agency must ensure that maintenance is scheduled, performed, and documented. The control applies to all types of maintenance to any system component (including applications) conducted by any local or nonlocal entity. System maintenance also includes those components not directly associated with information processing and/or data/information retention such as scanners, copiers, and printers. Information necessary for creating effective maintenance records includes: date and time of maintenance, name of individuals or group performing the maintenance, name of escort (if necessary), a description of the maintenance performed, and the information system component(s)/equipment removed or replaced (including identification numbers when applicable).

See IRS Publication 1075 Section 9.3.9.2 (page 73) for further guidance.

IRS Response:

9.3.9.3 MA-3: Maintenance Tools

Describe how the agency approves, controls, and monitors information system maintenance tools.

Agency SSR Response:

The agency must approve, control, and routinely monitor the use of information system maintenance tools. Maintenance tools can include hardware, software, and firmware items, for example: hardware/software diagnostic test equipment and hardware/software packet sniffers.

See IRS Publication 1075 Section 9.3.9.3 (page 73) for further guidance.

IRS Response:

9.3.9.4 MA-4: Non-Local Maintenance

Describe how the agency controls and monitors non-local maintenance. Include how the agency:

- A) Approves, controls, and monitors non-local maintenance and diagnostic activities.
- B) Allows the use of non-local maintenance and diagnostic tools only as consistent with agency policy and documented in the security plan for the information system.
- C) Employs multi-factor authenticator in the establishment of non-local maintenance and diagnostic sessions.
- D) Maintains records for non-local maintenance and diagnostic activities.
- E) Terminates session and network connections when non-local maintenance is completed.
- F) Documents policies and procedures for the establishment and use of non-local maintenance and diagnostic connections. (CE2)

Agency SSR Response:

The agency must approve, control, and routinely monitor the use of remotely-executed maintenance and diagnostic activities. Nonlocal maintenance and diagnostic activities are those activities conducted by individuals communicating through a network, either an external network (e.g., the Internet) or an internal network. Local maintenance and diagnostic activities are those activities carried out by individuals physically present at the information system or information system component and not communicating across a network connection.

See IRS Publication 1075 Section 9.3.9.4 (page 73) for further guidance.

IRS Response:

9.3.9.5 MA-5: Maintenance Personnel

Describe how the agency allows only authorized personnel to perform maintenance on the information system. Include how the agency:

- A) Establishes a process for maintenance personnel authorization and maintains a list of authorized maintenance organizations or personnel.
- B) Ensures that non-escorted personnel performing maintenance on the information system have required access authorizations.
- C) Designates agency personnel with required access authorizations and technical competence to supervise the maintenance activities of personnel who do not possess the required access authorizations.

Agency SSR Response:

The agency shall ensure that it allows only authorized personnel to perform maintenance on the information system.

See IRS Publication 1075 Section 9.3.9.5 (page 74) for further guidance.

IRS Response:

9.3.10 Media Protection (MP)

9.3.10.1 MP-1: Media Protection Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A media protection policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.

 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Media protection procedures to facilitate the policy and MP related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Note: Information system media is defined to include both digital (e.g., diskettes, magnetic tapes, external/removable hard drives, flash/thumb drives, CDs, DVDs) and non-digital (e.g., paper).

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary media access policy and procedures.

See IRS Publication 1075 Section 9.3.10.1 (page 74) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.10.2 MP-2: Media Access

Where information system digital and non-digital media contains FTI, describe how the agency restricts access to authorized individuals.

Agency SSR Response:

The agency shall restrict access to information system media to authorized individuals, where this media contains FTI.

Restricting non-digital media access includes, for example: denying access to patient medical records in a community hospital unless the individuals seeking access to such records are authorized healthcare providers. Restricting access to digital media includes, for example: limiting access to design specifications stored on compact disks in the media library to the project leader and the individuals on the development team.

See IRS Publication 1075 Section 9.3.10.2 (page 74) for further guidance.

IRS Response:

9.3.10.3 MP-3: Media Marking

Describe how the agency labels information system media containing FTI to indicate the distribution limitations and handling caveats.

Per Publication 1075, the agency must label removable media (CDs, DVDs, diskettes, magnetic tapes, external hard drives and flash drives) and information system output containing FTI (reports, documents, data files, back-up tapes) indicating "Federal Tax Information". Notice 129-A and Notice 129-B IRS provided labels can be used for this purpose.

Agency SSR Response:

The agency should physically control and securely store information system media within controlled areas, where this media contains FTI.

See IRS Publication 1075 Section 9.3.10.3 (page 74) for further guidance.

IRS Response:	
9.3.10.4 MP-4: Media Storage	
Describe how the agency protects the storage of digital and non-digital media. Include how the agency: A) Physically controls and securely stores information system media containing FTI.	
 Protects information system media until the media is destroyed or sanitized using approved equipment, techniques and procedures. 	ŝ,
Refer to Section 4.0, Secure Storage—IRC 6103(p)(4)(B), of Publication 1075 for additional secure storage requirements.	
Agency SSR Response:	
See IRS Publication 1075 Section 9.3.10.4 (page 75) for further guidance.	
IRS Response:	
ins response.	
9.3.10.5 MP-5: Media Transport	
Describe how the agency protects the transport of digital and non-digital media. Include how the agency:	
A) Protects and controls digital and non-digital media during transport outside of controlled areas.	
B) Maintains accountability for information system media during transport outside of controlled areas.	
C) Documents activities associated with the transport of information system media (the agency must use transmittals	or
an equivalent tracking method to ensure FTI reaches its intended destination).	
D) Restricts the activities associated with the transport of information system media to authorized personnel.	
 E) Describe how the agency implements cryptographic mechanisms to protect the confidentiality and integrity of information stored on digital media during transport outside of controlled areas. (CE4) 	
Refer to Section 4.4, FTI in Transit, of Publication 1075 for more information on transmittals and media transport requirements.	
Agency SSR Response:	
Agency 33K Kesponse.	
All media being transported from the IRS must employ the use of encryption.	
See IRS Publication 1075 Section 9.3.10.5 (page 75) for further guidance.	
IRS Response:	

9.3.10.6 MP-6: Media Sanitization

Describe how the agency sanitizes media containing FTI. Include how the agency:

- A) Sanitizes media containing FTI prior to disposal, release out of agency control, or release for reuse using IRS-approved sanitization techniques in accordance with applicable federal and agency standards and policies.
- B) Employs sanitization mechanisms with the strength and integrity commensurate with the security category or classification of the information.
- C) Reviews, approves, tracks, documents, and verifies media sanitization and disposal actions. (CE1)

Additional requirements for protecting FTI during media sanitization are provided in Section 9.3.10.6, Media Sanitization (MP-6); Section 9.4.7, Media Sanitization; and Exhibit 10, Data Warehouse Security Requirements, of Publication 1075.

Agency SSR Response:

The agency shall sanitize information system media prior to disposal or release for reuse.

See IRS Publication 1075 Section 9.3.10.6 (pages 75-76) for further guidance.

IRS Response:

PE controls are applicable to the data center where systems reside, as well as any office location where employees access FTI. For each applicable location, we will be looking for specific location controls.

Pub 1075 section 4.2—referred to as the 'two-barrier rule' that is implemented to prevent unauthorized access to FTI. Barriers can include but are not limited to: secured perimeter, security room, badged employee, and security container.

9.3.11 Physical and Environmental Protection (PE)

When responding to the Physical and Environmental Protection controls, the agency should consider physical security not only for the information system, but any paper FTI, as well. Please include information about compliance with minimum protection standards (MPS) within the responses to these controls, as appropriate. For more information about MPS, refer to Publication 1075, Section 4.2.

9.3.11.1 PE-1: Physical and Environmental Protection Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

A) A physical and environmental protection policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.

Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.

B) Physical and environmental protection procedures to facilitate the policy and PE related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary physical and environmental protection policies and procedures. See IRS Publication 1075 Section 9.3.11.1 (page 76) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

Annotated SSR Template V

9.3.11.2 PE-2: Physical Access Authorizations

Describe how the agency enforces physical access authorizations to the information system(s) and facilities at spaces where FTI is received, processed, stored, or transmitted. Include how the agency:

- A) Develops, approves, and maintains a list of individuals with authorized access to the facility where the information system resides.
- B) Issues authorization credentials for facility access.
- C) Reviews the access list detailing authorized facility access by individuals at least annually.
- D) Removes individuals from the facility access list when access is no longer required.
- E) Enforces physical access authorizations to the information system in addition to the physical access controls for the facility at spaces where FTI is received, processed, stored, or transmitted. (CE1)

Note: The response for this control should encompass both access to the information system(s), as well as access to any paper FTI.

Agency SSR Response:

Below is an example delineation of location based controls:

- Data Center –
- Field Office location –
- Off-site Storage location –

See IRS Publication 1075 Section 9.3.11.2 (pages 76-77) for further guidance.

IRS Response:

9.3.11.3 PE-3: Physical Access Control

Describe how the agency enforces physical access controls. Include how the agency:

- A) Enforces physical access authorizations at entry/exit points to facilities where the information systems that receive, process, store, or transmit FTI reside by:
 - Verifying individual access authorizations before granting access to the facility; and
 - Controlling ingress/egress to the facility using physical access control systems/devices or guards.
- B) Maintains physical access audit logs for entry/exit points.
- C) Provides security safeguards to control access to areas within the facility officially designated as publicly accessible.
- D) Escorts visitors and monitor visitor activity.
- E) Secures keys, combinations, and other physical access devices.
- F) Maintains an inventory of physical access devices.
- G) Changes combinations and keys when an employee who knows the combination retires, terminates employment, or transfers to another position or at least annually.

Note: The response for this control should encompass both access to the information system(s), as well as access to any paper FTI.

Agency SSR Response:

Pub 1075 section 4.2—referred to as the 'two-barrier rule' that is implemented to prevent unauthorized access to FTI. Barriers can include but are not limited to: secured perimeter, security room, badged employee, and security container.

See IRS Publication 1075 Section 9.3.11.3 (page 77) for further guidance.

A locked server rack can serve as the second barrier, as long as someone with authorized access to FTI maintains control of the key within a multi-tenant data center environment

IRS Response:
9.3.11.4 PE-4: Access Control for Transmission Medium
Describe how the agency controls physical access to information system distribution and transmission lines within agency facilities.
Agency SSR Response:
Physical security safeguards applied to information system distribution and transmission lines help to prevent accidental damage, disruption, and physical tampering. In addition, physical safeguards may be necessary to help prevent eavesdropping or in transit modification of unencrypted transmissions. Security safeguards to control physical access to system distribution and transmission lines include, for example: (i) locked wiring closets; (ii) disconnected or locked spare jacks; and/or (iii) protection of cabling by conduit or cable trays.
See IRS Publication 1075 Section 9.3.11.4 (page 77) for further guidance.
IRS Response:
9.3.11.5 PE-5: Access Control for Output Devices
Describe how the agency controls physical access to information system output devices to prevent unauthorized individuals from obtaining the output. Examples of information system output devices are: monitors, printers, copiers, scanners, fax machines, and audio devices.
Agency SSR Response:
See IRS Publication 1075 Section 9.3.11.5 (page 77) for further guidance.
IRS Response:
9.3.11.6 PE-6: Monitoring Physical Access
Describe how the agency monitors physical access. Include how the agency:
A) Monitors physical access to the facility where the information system resides to detect and respond to physical
security incidents. Include how the agency.
B) Reviews physical access logs.

Per Publication 1075, the agency must review physical access logs annually.

C) Coordinates results of reviews and investigations with the agency incident response capability.

Note: The response for this control should encompass both access to the information system(s), as well as access to any paper FTI.

D) Monitors physical intrusion alarms and surveillance equipment. (CE1)

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Agency SSR Response:
Agency incident response capabilities include investigations of and responses to detected physical security incidents. Security
incidents include, for example, apparent security violations or suspicious physical access activities. Suspicious physical access
activities include, for example: (i) accesses outside of normal work hours; (ii) repeated accesses to areas not normally accessed;
(iii) accesses for unusual lengths of time; and (iv) out-of-sequence accesses.
(iii) decesses for diffusion religins of time, and (iv) out of sequence decesses.
See IRS Publication 1075 Section 9.3.11.6 (pages 77-78) for further guidance.
IRS Response:
9.3.11.7 PE-8: Visitor Access Records
Describe how the agency controls access to visitors. Include how the agency:
A) Maintains visitor access records to the facility where the information system resides.
 B) Document the frequency in which visitor access records are reviewed. Per Publication 1075, the agency must review visitor access records at least annually.
Refer to Section 4.3, Restricted Area Access, of Publication 1075 for visitor access (AAL) requirements.
Note: The response for this control should encompass both access to the information system(s), as well as access to any paper FTI.
Agency SSR Response:
Visitor access records include, for example, names and organizations of persons visiting, visitor signatures, forms of
identification, dates of access, entry and departure times, purposes of visits, and names and organizations of persons visited.
Visitor access records are not required for publicly accessible areas.
and the same and the same property of the same and the sa
See IRS Publication 1075 Section 9.3.11.7 (page 78) for further guidance.
IRS Response:
0.3.11.9 DE 16. Delivery and Demoval
9.3.11.8 PE-16: Delivery and Removal
Describe how the agency authorizes, monitors, and controls information system components entering and exiting the facility. Document how the agency maintains records of those items.
Agency SSR Response:
See IRS Publication 1075 Section 9.3.11.8 (page 78) for further guidance.
(page 70) to tarties gardeness
IRS Response:

9.3.11.9 PE-17: Alternate Work Site

Describe how the agency manages and controls alternate work sites. Include how the agency:

- A) Employs IRS Office of Safeguards requirements at alternate work sites.
- B) Assesses, as feasible, the effectiveness of security controls at alternate work sites.
- C) Provides a means for employees to communicate with information security personnel in case of security incidents or problems.

Note: Alternate work sites may include, for example, government facilities or private residences of employees. Refer to Section 4.7: Telework Locations, of Publication 1075 for additional requirements.

Agency SSR Response:

Alternate work sites may include, for example: agency facilities, field offices, or private residences of employees.

See IRS Publication 1075 Section 9.3.11.9 (page 78) for further guidance.

IRS Response:

9.3.11.10 PE-18: Location of Information System Components

Describe how the agency positions information system components within the facility to minimize potential damage from physical and environmental hazards and to minimize the opportunity for unauthorized access.

Refer to Section 4.3: *Restricted Area Access*, and Section 4.5: Physical Security of Computers, Electronic, and Removable Media, of Publication 1075 for additional information.

Agency SSR Response:

Physical and environmental hazards include, for example, flooding, fire, tornados, earthquakes, hurricanes, acts of terrorism, vandalism, electromagnetic pulse, electrical interference, and other forms of incoming electromagnetic radiation. In addition, agencies should consider the location of physical entry points where unauthorized individuals, while not being granted access, might nonetheless be in close proximity to information systems and therefore increase the potential for unauthorized access to agency communications (e.g., through the use of wireless sniffers or microphones).

Please also document how user workstations (permitted to view/access FTI) are positioned to minimize the risk of shoulder surfing.

See IRS Publication 1075 Section 9.3.11.10 (page 78) for further guidance.

IRS Response:

9.3.12 Planning (PL)

9.3.12.1 PL-1: Security Planning Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A security planning policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Security planning procedures to facilitate the policy and PL related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

IRS Response:

The agency must develop, document, disseminate, and update as necessary security planning policy and procedures.

See IRS Publication 1075 Section 9.3.12.1 (page 79) for further guidance.

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.12.2 PL-2: System Security Plan

Describe how the agency develops and approves an accurate System Security Plan (SSP). Please note, the agency SSR satisfies this requirement (Section 7.0, Reporting Requirements—6103(p)(4)(E), of Publication 1075). Describe how the agency:

- A) Develops an SSP (or SSR) that:
 - Is consistent with the agency's safeguarding requirements;
 - Explicitly defines the information systems that receive, process, store, or transmit FTI;
 - Describes the operational context of the information system in terms of missions and business processes;
 - Describes the operational environment for the information system and relationships with or connections to other information systems;
 - Provides an overview of the security requirements for the system;
 - Includes any relevant overlays, if applicable;
 - Documents the security controls in place or planned for meeting those requirements, including a rationale for the tailoring and supplementation decisions; and
 - Is reviewed and approved by the authorizing official or designated representative prior to plan implementation.
- B) Distributes copies of the SSP (or SSR) and communicates subsequent changes to designated agency officials and the IRS Office of Safeguards.
- C) Reviews the SSP (or SSR).
 - Per Publication 1075, SSPs (and the SSR) should be reviewed on at least an annual basis.
- D) Updates the SSP (or SSR) to address changes to the information system/environment of operation or problems identified during plan implementation or security control assessments.
- E) Protects the SSP (or SSR) from unauthorized disclosure and modification.

Agency SSR Response:

The agency must develop, document, and establish a system security plan by describing the security requirements, current controls and planned controls for protecting agency information systems and Federal tax information.

See IRS Publication 1075 Section 9.3.12.2 (pages 79-80) for further guidance.

IRS Response:

If the agency does not have System Security Plans (SSP) for IT systems containing FTI, please reference the agency's Safeguard Security Report (SSR) as evidence for this security control.

9.3.12.3 PL-4: Rules of Behavior

Describe how the agency establishes and maintains a rules of behavior for accessing FTI and/or using information systems containing FTI. Describe how the agency:

- A) Establishes and makes readily available to individuals requiring access to the information system, the rules that describe their responsibilities and expected behavior with regard to information and information system usage.
- B) Receives a signed acknowledgement from such individuals, indicating that they have read, understand, and agree to abide by the rules of behavior, before authorizing access to information and the information system.
- C) Reviews and updates the rule of behavior.
- D) Requires individuals who have signed a previous version of the rules of behavior to read and re-sign when the rules of behavior are revised/updated.
- E) Includes in the rules of behavior, explicit restrictions on the use of social media/networking sites and posting agency information on public websites. (CE1)

Note: The Office of Safeguards prohibits sharing FTI using any social media/networking sites.

Agency SSR Response:

The agency must develop, document, and establish a set of rules describing their responsibilities and expected behavior for information system use for users of the information system.

See IRS Publication 1075 Section 9.3.12.3 (page 80) for further guidance.

IRS Response:

The ROB is different than annual disclosure awareness training. This is generally an agency document that is created for all users to accept computer use guidelines and behavior.

9.3.13 Personnel Security (PS)

9.3.13.1 PS-1: Personnel Security Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A personnel security policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Personnel security procedures to facilitate the policy and PS related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency shall develop, document, disseminate, and update as necessary personnel security policies and procedures.

See IRS Publication 1075 Section 9.3.13.1 (page 80) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.13.2 PS-2: Position Risk Designation

Describe how the agency identifies and controls risk designations for personnel with access to FTI. Include how the agency:

- A) Assigns a risk designation to all agency positions.
- B) Establishes screening criteria for individuals filling those positions.
- Reviews and updates position risk designations.
 Per Publication 1075, review and update position risk designations annually.

Agency SSR Response:

The agency shall assign risk designations to all positions and establish screening criteria for individuals filling those positions. Risk designations can guide and inform the types of authorizations individuals receive when accessing organizational information and information systems. Position screening criteria include explicit information security role appointment requirements (e.g., training, security clearances).

See IRS Publication 1075 Section 9.3.13.2 (page 80) for further guidance.

IRS Response:

9.3.13.3 PS-3: Personnel Screening

Describe how the agency:

- A) Screens individuals prior to authorizing access to the information system.
- B) Rescreens individuals according to agency-defined conditions requiring rescreening. Please define the frequency in the agency response.

Agency SSR Response:

The agency shall ensure that individuals are screened before authorizing access to information systems and information. Agencies may define different rescreening conditions and frequencies for personnel accessing information systems based on types of information processed, stored, or transmitted by the systems.

See IRS Publication 1075 Section 9.3.13.3 (page 81) for further guidance.

[Agency code] Safeguard Security Report [Year]						
IRS Response:						
9.3.13.4 PS-4: Personnel Termination						
Describe how the agency handles personnel termination at the agency. Include how the agency:						
A)	Disables information system access.					
B)	Terminates/revokes any authenticators/credentials associated with the individual.					
C)	Conducts exit interviews, as needed.					
D)	Retrieves all security-related agency information system—related property.					
E)	Retains access to agency information and information systems formerly controlled by the terminated individual.					
F)	Notifies agency personnel upon termination of the employee.					

Agency SSR Response:

The agency shall terminate information system access, conduct exit interviews, and ensure return of all information systemrelated property when employment is terminated. Information system-related property includes, for example: hardware authentication tokens, system administration technical manuals, keys, identification cards, and building passes. Exit interviews ensure that terminated individuals understand the security constraints imposed by being former employees and that proper accountability is achieved for information system-related property. Security topics of interest at exit interviews can include, for example: reminding terminated individuals of nondisclosure agreements and potential limitations on future employment. Exit interviews may not be possible for some terminated individuals, for example, in cases related to job abandonment, illnesses, and nonavailability of supervisors. Exit interviews are important for individuals with security clearances. Timely execution of termination actions is essential for individuals terminated for cause. In certain situations, agencies should consider disabling the information system accounts of individuals that are being terminated prior to the individuals being notified.

See IRS Publication 1075 Section 9.3.13.4 (page 81) for further guidance.

IRS Response:			

9.3.13.5 PS-5: Personnel Transfer

Describe how the agency handles personnel transfer at the agency. Include how the agency:

- A) Reviews and confirms ongoing operational need for current logical and physical access authorizations to information systems/facilities when individuals are reassigned or transferred to other positions within the agency.
- Initiates transfer or reassignment actions following the formal transfer action.
- C) Modifies access authorizations as needed to correspond with any changes in operational need due to reassignment
- D) Notifies designated agency personnel, as required.

Agency SSR Response:

This control applies when reassignments or transfers of individuals are permanent or of such extended durations as to make the actions warranted. Agencies should define actions appropriate for the types of reassignments or transfers, whether permanent or extended. Actions that may be required for personnel transfers or reassignments to other positions within agencies include, for example: (i) returning old and issuing new keys, identification cards, and building passes; (ii) closing information system accounts and establishing new accounts; (iii) changing information system access authorizations (i.e., privileges); and (iv) providing for access to official records to which individuals had access at previous work locations and in previous information system accounts.

See IRS Publication 1075 Section 9.3.13.5 (page 81) for further guidance.

IRS Response:

9.3.13.6 PS-6: Access Agreements

Describe how the agency acknowledges and authorizes access to FTI (prior to gaining access). Describe how the agency:

- A) Develops and documents access agreements for agency information systems.
- B) Reviews and updates the access agreements, at least annually.
- C) Ensures that individuals requiring access to agency information and information systems:
 - Sign appropriate access agreements prior to being granted access, and
 - Re-sign access agreements to maintain access to agency information systems when access agreements have been updated or at least annually.

Agency SSR Response:

The agency shall ensure that appropriate access agreements must be completed before authorizing access to users requiring access to the information system and Federal Tax Information. Access agreements include, for example, nondisclosure agreements, acceptable use agreements, rules of behavior, and conflict-of-interest agreements.

See IRS Publication 1075 Section 9.3.13.6 (page 81) for further guidance.

IRS Response:

9.3.13.7 PS-7: Third-Party Personnel Security

Describe how the agency manages third-party personnel security requirements. Include how the agency:

- A) Establishes personnel security requirements, including security roles and responsibilities for third-party providers.
- B) Requires third-party providers to comply with personnel security policies and procedures established by the agency.
- C) Documents personnel security requirements.
- D) Requires third-party providers to notify the agency of any personnel transfers or terminations of third-party personnel who possess agency credentials or badges or who have information system privileges.
- E) Monitors provider compliance.

Agency SSR Response:

The agency shall ensure that personnel security requirements must be established for third-party providers and monitored for provider compliance.

See IRS Publication 1075 Section 9.3.13.7 (page 82) for further guidance.

IRS Response:

9.3.13.8 PS-8: Personnel Sanctions

Describe how the agency manages personnel sanctions. Include how the agency:

- A) Employs a formal sanctions process for individuals failing to comply with established information security policies and procedures.
- B) Notifies designated agency personnel when a formal employee sanctions process is initiated, identifying the individual sanctioned and the reason for the sanction.

Agency SSR Response:

The agency shall ensure that establish a formal sanctions process for personnel who fail to comply with established information security policies, as this relates to FTI.

See IRS Publication 1075 Section 9.3.13.8 (page 82) for further guidance.

IRS Response:

9.3.14 Risk Assessment (RA)

9.3.14.1 RA-1: Risk Assessment Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A risk assessment policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.

 Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) Risk assessment procedures to facilitate the policy and RA related security controls. Please include details regarding procedure review/update.

Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must have in place, risk assessment policy and procedures that are disseminated to the appropriate parties and updated on a regular basis. This includes, but is not limited to, risk assessments and risk assessment updates.

See IRS Publication 1075 Section 9.3.14.1 (page 82) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

Annotated SSR Template

9.3.14.2 RA-3: Risk Assessment

Describe how the agency conducts regular risk assessments against the information systems and operating environments receiving, storing, processing, and/or transmitting FTI. Include how the agency:

- A) Conducts an assessment of risk, including the likelihood and magnitude of harm, from the unauthorized access, use, disclosure, disruption, modification, or destruction of the information system and the information it processes, stores, or transmits.
- B) Documents risk assessment results in a risk assessment report.
- C) Reviews risk assessment results at least annually.
- D) Disseminates risk assessment results to designated agency officials.
- E) Updates the risk assessment report at least every three years or whenever there are significant changes to the information system or environment of operation (including the identification of new threats and vulnerabilities) or other conditions that may impact the security state of the system.

Agency SSR Response:

The agency must conduct a security assessment that is in accordance with Federal Information Processing Standards (FIPS) publication 199 that will determine the risk and magnitude of harm that could result from the unauthorized access, use, disclosure, disruption, modification, or destruction of information and information systems that support the operations and assets of the agency regarding the use of FTI.

See IRS Publication 1075 Section 9.3.14.2 (page 83) for further guidance.

IRS Response:

If penetration tests are conducted against the agency, please state so in the agency's response to RA-5: Vulnerability Scanning.

9.3.14.3 RA-5: Vulnerability Scanning

Describe how the agency scans for vulnerabilities in the information system and hosted applications. Include how the agency:

- A) Scans for vulnerabilities using which automated tools. Define the frequency at which vulnerability scans are conducted
 - Per Publication 1075, the agency must scan, at a minimum, monthly for all systems and when new vulnerabilities potentially affecting the system/applications are identified and reported.
- B) Employs vulnerability scanning tools and techniques that facilitate interoperability among tools and automate parts of the vulnerability management process by using standards for: enumerating platforms, software flaws, and improper configurations; formatting checklists and test procedures; and measuring vulnerability impact.
- C) Analyzes vulnerability scan reports and results from security control assessments.
- D) Remediates legitimate vulnerabilities in accordance with an assessment of risk.
- E) Shares information obtained from the vulnerability scanning process and security control assessments with designated agency officials to help eliminate similar vulnerabilities in other information systems (i.e., systemic weaknesses or deficiencies).
- F) Employs vulnerability scanning tools that include the capability to readily update the information system vulnerabilities to be scanned. (CE1)

Agency SSR Response:

The agency must specify the frequency that scans are performed on systems containing FTI to identify potential vulnerabilities in the system. Vulnerability scanning includes, for example: (i) scanning for patch levels; (ii) scanning for functions, ports, protocols, and services that should not be accessible to users or devices; and (iii) scanning for improperly configured or incorrectly operating information flow control mechanisms.

See IRS Publication 1075 Section 9.3.14.3 (page 83) for further guidance.

9.3.15 System and Services Acquisition (SA)

9.3.15.1 SA-1: System and Services Acquisition Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A system and services acquisition policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 - Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) System and services acquisition procedures to facilitate the policy and SA related security controls. Please include details regarding procedure review/update.
 - Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

IRS Response:

The agency must develop, document, disseminate, and update as necessary system and services acquisition policy and procedures to facilitate implementing system and services acquisition controls.

See IRS Publication 1075 Section 9.3.15.1 (page 84) for further guidance.

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.15.2 SA-2: Allocation of Resources

Describe how the agency allocates resources to ensure information security is accounted for. Include how the agency:

- A) Determines information security requirements for the information system or information system service in mission/business process planning.
- B) Determines, documents, and allocates the resources required to protect the information system or information system service as part of its capital planning and investment control process.
- C) Establishes a discrete line item for information security in agency programming and budgeting documentation.

Agency SSR Response:

The agency must document, and allocate as part of its capital planning and investment control process, the resources required to adequately protect the information system.

See IRS Publication 1075 Section 9.3.15.2 (page 84) for further guidance.

IRS Response:

9.3.15.3 SA-3: System Development Life Cycle

Describe how the agency manages the information system using an approved System Development Life Cycle (SDLC). Include how the agency:

- A) Manages the information system using an SDLC that incorporates information security considerations.
- B) Defines and documents information security roles and responsibilities throughout the SDLC.
- C) Identifies individuals having information security roles and responsibilities.
- D) Integrates the agency information security risk management process into SDLC activities.

Agency SSR Response:

The agency must manage the information system using a system development life cycle methodology that includes information security considerations whenever information systems contain FTI. A well-defined system development life cycle provides the foundation for the successful development, implementation, and operation of agency information systems. To apply the required security controls within the system development life cycle requires a basic understanding of information security, threats, vulnerabilities, adverse impacts, and risk to critical missions/business functions. The security engineering principles in SA-8 cannot be properly applied if individuals that design, code, and test information systems and system components (including information technology products) do not understand security. Therefore, agencies should include qualified personnel, for example: chief information security officers, security architects, security engineers, and information system security officers in system development life cycle activities to ensure that security requirements are incorporated into agency information systems. The effective integration of security requirements into enterprise architecture also helps to ensure that important security considerations are addressed early in the system development life cycle and that those considerations are directly related to the agency mission/business processes. This process also facilitates the integration of the information security architecture into the enterprise architecture, consistent with organizational risk management and information security strategies.

See IRS Publication 1075 Section 9.3.15.3 (page 84) for further guidance.

IRS Respons	e:
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9.3.15.4 SA-4: Acquisition Process

Describe how the agency accounts for information system requirements throughout the acquisition process.

- A) Describe how the agency includes the following requirements, descriptions, and criteria, explicitly or by reference, in the acquisition contract for the information system, system component, or information system service in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, standards, guidelines, and agency mission/business needs:
 - Security functional requirements; Security strength requirements; Security assurance requirements; Security-related documentation requirements; Requirements for protecting security-related documentation; Description of the information system development environment and environment in which the system is intended to operate; and Acceptance criteria.
- B) When applicable, describe how the agency requires the developer of the information system, system component, or information system service to provide a description of the functional properties of the security controls to be employed. (CE1)

Agency SSR Response:

The agency must include security requirements and/or security specifications, either explicitly or by reference, in information system acquisition contracts based on an assessment of risk whenever information systems contain FTI.

See IRS Publication 1075 Section 9.3.15.4 (pages 84-85) for further guidance.

IRS Response:		

9.3.15.5 SA-5: Information System Documentation

Describe how the agency develops and maintains information system documentation. Include how the agency:

- A) Obtains administrator documentation for the information system, system component, or information system service that describes: secure configuration, installation, and operation of the system, component, or service; effective use and maintenance of security functions/mechanisms; and known vulnerabilities regarding configuration and use of administrative (i.e., privileged) functions.
- B) Obtains user documentation for the information system, system component, or information system service that describes: user-accessible security functions/mechanisms and how to effectively use those security functions/mechanisms; methods for user interaction, which enable individuals to use the system, component, or service in a more secure manner; and user responsibilities in maintaining the security of the system, component, or service.
- C) Documents attempts to obtain information system, system component, or information system service documentation when such documentation is either unavailable or nonexistent.
- D) Protects documentation, as required.
- E) Distributes documentation to designated agency officials.

Agency SSR Response:

The agency must obtain, protect as required, and make available to authorized personnel, adequate documentation for the information system whenever information systems contain FTI. Agencies must ensure that there is sufficient information system documentation, such as a Security Features Guide.

See IRS Publication 1075 Section 9.3.15.5 (page 85) for further guidance.

IRS Response:		

9.3.15.6 SA-8: System Engineering Principles

Describe how the agency applies information system security engineering principles in the specification, design, development, implementation, and modification of information systems containing, processing, or transmitting FTI.

Agency SSR Response:

The agency must design and implement the information system using security engineering principles whenever information systems contain FTI. Security engineering principles include, for example: (i) developing layered protections; (ii) establishing sound security policy, architecture, and controls as the foundation for design; (iii) incorporating security requirements into the system development life cycle; (iv) delineating physical and logical security boundaries; (v) ensuring that system developers are trained on how to build secure software; (vi) tailoring security controls to meet organizational and operational needs; (vii) performing threat modeling to identify use cases, threat agents, attack vectors, and attack patterns as well as compensating controls and design patterns needed to mitigate risk; and (viii) reducing risk to acceptable levels, thus enabling informed risk management decisions.

See IRS Publication 1075 Section 9.3.15.6 (page 86) for further guidance.

IRS Response:
9.3.15.7 SA-9: External Information System Services
Describe how the agency controls and monitors external information system services. Include how the agency:
A) Requires that providers of external information system services comply with agency information security requirements and employ to include (at a minimum) security requirements contained within this publication and applicable federal laws, Executive Orders, directives, policies, regulations, standards, and established service-level agreements.
B) Defines and documents government oversight and user roles and responsibilities with regard to external information system services.
 C) Monitors security control compliance by external service providers on an ongoing basis. D) Restricts the location of information systems that receive, process, store, or transmit FTI to areas within the United States territories, embassies, or military installations. (CE5)
Note: Agencies must prohibit the use of non-agency-owned information systems, system components, or devices that receive, process, store, or transmit FTI unless explicitly approved by the Office of Safeguards. For notification requirements, refer to Section 7.4.5, Non-Agency-Owned Information Systems, of Publication 1075. The contract for the acquisition must contain Exhibit 7 language, as appropriate (see Section 9.3.15.4, Acquisition Process (SA-4), and Exhibit 7, Safeguarding Contract Language).
Agency SSR Response:
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See IRS Publication 1075 Section 9.3.15.7 (page 86) for further guidance.
IRS Response:
9.3.15.8 SA-10: Developer Configuration Management
Describe how the agency requires the developer of the information system, system component, or information system service to:
 A) Perform configuration management during system, component, or service development, implementation, and operation.
B) Document, manage, and control the integrity of changes to the system, component, or service.C) Implement only agency-approved changes to the system, component, or service.
 D) Document approved changes to the system, component, or service and the potential security impacts of such changes.
E) Track security flaws and flaw resolution within the system, component, or service and report findings to designated agency officials.
Agency SSR Response:
See IRS Publication 1075 Section 9.3.15.8 (page 86) for further guidance.
IRS Response:

9.3.15.9 SA-11: Developer Security Testing and Evaluation

Describe how the agency requires the developer of the information system, system component, or information system service to:

- A) Create and implement a security assessment plan.
- B) Perform security testing/evaluation.
- C) Produce evidence of the execution of the security assessment plan and the results of the security testing/evaluation.
- D) Implement a verifiable flaw remediation process.
- E) Correct flaws identified during security testing/evaluation.

Agency SSR Response:

The information system developers shall create a security test and evaluation plan, implement the plan, and document the results. Developmental security testing/evaluation occurs at all post-design phases of the system development life cycle. Such testing/evaluation confirms that the required security controls are implemented correctly, operating as intended, enforcing the desired security policy, and meeting established security requirements. Security properties of information systems may be affected by the interconnection of system components or changes to those components. These interconnections or changes (e.g., upgrading or replacing applications and operating systems) may adversely affect previously implemented security controls. This control provides additional types of security testing/evaluation that developers can conduct to reduce or eliminate potential flaws. Testing custom software applications may require approaches such as static analysis, dynamic analysis, binary analysis, or a hybrid of the three approaches. Developers can employ these analysis approaches in a variety of tools (e.g., webbased application scanners, static analysis tools, binary analyzers) and in source code reviews. Security assessment plans provide the specific activities that developers plan to carry out including the types of analyses, testing, evaluation, and reviews of software and firmware components, the degree of rigor to be applied, and the types of artifacts produced during those processes.

See IRS Publication 1075 Section 9.3.15.9 (page 87) for further guidance.

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9.3.15.10 SA-22: Unsupported System Components

Describe how the agency replaces information system components when support for the components is no longer available from the developer, vendor, or manufacturer.

Agency SSR Response:

Support for information system components includes, for example: software patches, firmware updates, replacement parts, and maintenance contracts. Unsupported components (e.g., when vendors are no longer providing critical software patches), provide a substantial opportunity for adversaries to exploit new weaknesses discovered in the currently installed components. Exceptions to replacing unsupported system components may include, for example: systems that provide critical mission/business capability where newer technologies are not available or where the systems are so isolated that installing replacement components is not an option.

See IRS Publication 1075 Section 9.3.15.10 (page 87) for further guidance.

IRS Response:

Failure to implement this security control can lead to a catastrophic (or soon to be, critical) finding that warrants remediation. In your response, please document if any technologies receiving, storing, processing and/or transmitting FTI deployed in the environment are no longer supported. Please include the agency's remediation plan and timeframe.

9.3.16 System and Communications Protection (SC)

9.3.16.1 SC-1: System and Communications Protection Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A system and communications protection policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 - Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) System and communications protection procedures to facilitate the policy and SC related security controls. Please include details regarding procedure review/update.
 - Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary system and communications policy and procedures.

See IRS Publication 1075 Section 9.3.16.1 (page 87) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Please include the agency's review frequency for both policies and procedures.

9.3.16.2 SC-2: Application Partitioning

Describe how the agency separates user functionality (including user interface services) from information system management functionality.

Agency SSR Response:

The information system shall separate front end interface from the back end processing and data storage. Information system management functionality includes, for example: functions necessary to administer databases, network components, workstations, or servers, and typically requires privileged user access. The separation of user functionality from information system management functionality is either physical or logical. Organizations implement separation of system management-related functionality from user functionality by using different computers, different central processing units, different instances of operating systems, different network addresses, virtualization techniques, or combinations of these or other methods, as appropriate. This type of separation includes, for example, web administrative interfaces that use separate authentication methods for users of any other information system resources. Separation of system and user functionality may include isolating administrative interfaces on different domains and with additional access controls.

See	IRS	Publication	10/5	Section	9.3.16.2	(page 87) for further	guidance.
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IRS Response:		

9.3.16.3 SC-4: Information In Shared Resources

Describe how the agency prevents unauthorized and unintended information transfer via shared system resources.

Agency SSR Response:

The information system shall prevent unauthorized and unintended information transfer via shared system resources. This control prevents information, including encrypted representations of information, produced by the actions of prior users/roles (or the actions of processes acting on behalf of prior users/roles) from being available to any current users/roles (or current processes) that obtain access to shared system resources (e.g., registers, main memory, hard disks) after those resources have been released back to information systems. The control of information in shared resources is also commonly referred to as object reuse and residual information protection. This control does not address: (i) information remanence which refers to residual representation of data that has been nominally erased or removed; (ii) covert channels (including storage and/or timing channels) where shared resources are manipulated to violate information flow restrictions; or (iii) components within information systems for which there are only single users/roles.

See IRS Publication 1075 Section 9.3.16.3 (page 87) for further guidance.

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9.3.16.4 SC-5: Denial of Service Protection

Describe how the agency protects against or limit the effects of denial of service attacks.

Note: Refer to NIST SP 800-61 R2, Computer Security Incident Handling Guide, for additional information on denial of service.

Agency SSR Response:

A variety of technologies exist to limit, or in some cases, eliminate the effects of denial of service attacks. For example, boundary protection devices can filter certain types of packets to protect information system components on internal organizational networks from being directly affected by denial of service attacks. Employing increased capacity and bandwidth combined with service redundancy may also reduce the susceptibility to denial of service attacks

See IRS Publication 1075 Section 9.3.16.4 (page 88) for further guidance.

IRS Response:			

9.3.16.5 SC-7: Boundary Protection

Describe how the agency protects the network boundary hosting FTI. Include how the agency:

- A) Monitors and controls communications at the external boundary of the information system and at key internal boundaries within the system.
- B) Implements sub-networks for publicly accessible system components that are physically and logically separated from internal agency networks.
- C) Connects to external networks or information systems only through managed interfaces consisting of boundary protection devices arranged in accordance with agency security architecture requirements.
- D) Limits the number of external network connections to the information system. (CE3)
- E) Document how the agency:
 - Implements a secure managed interface for each external telecommunication service;
 - Establishes a traffic flow policy for each managed interface;
 - Protects the confidentiality and integrity of the information being transmitted across each interface;
 - Documents each exception to the traffic flow policy with a supporting mission/business need and duration of that need, and accept the associated risk;
 - Reviews exceptions to the traffic flow policy at a minimum annually, and remove exceptions that are no longer supported by an explicit mission/business need. (CE4)
- F) Describe if, and how the agency manages interfaces to deny network communications traffic by default and allow network communications traffic by exception (i.e., deny all, permit by exception). (CE5)
- G) Describe how the agency, in conjunction with a remote device, prevents the device from simultaneously establishing non-remote connections with the information system and connecting via some other connection to resources in external networks. (CE7)

Note: Refer to Section 9.4.10, Network Protections, of Publication 1075 for additional requirements for protecting FTI on networks.

Agency SSR Response:

Managed interfaces include, for example, gateways, routers, firewalls, guards, network-based malicious code analysis and virtualization systems, or encrypted tunnels implemented within the security architecture (e.g., routers protecting firewalls or application gateways residing on protected subnetworks).

The information system shall be configured to monitor and control communications at the external boundary of the information system and at key internal boundaries within the system.

See IRS Publication 1075 Section 9.3.16.5 (pages 88-89) for further guidance.

IRS Response:		

9.3.16.6 SC-8: Transmission Confidentiality and Integrity

Describe how the agency ensures information systems that receive, process, store, or transmit FTI are encrypted. Include how the agency:

- A) Protects the confidentiality and integrity of transmitted information.
- B) Implements cryptographic mechanisms to prevent unauthorized disclosure of FTI and detect changes to information during transmission across the wide area network (WAN) and within the local area network (LAN). (CE1)

Note: If encryption is not used, to reduce the risk of unauthorized access to FTI, the agency must use physical means (e.g., by employing protected physical distribution systems) to ensure that FTI is not accessible to unauthorized users. The agency must ensure that all network infrastructure, access points, wiring, conduits, and cabling are within the control of authorized agency personnel. Network monitoring capabilities must be implemented to detect and monitor for suspicious network traffic. For physical security protections of transmission medium, Refer to Section 9.3.11.4, Access Control for Transmission Medium (PE-4), of Publication 1075.

This control applies to both internal and external networks and all types of information system components from which information can be transmitted (e.g., servers, mobile devices, notebook computers, printers, copiers, scanners, fax machines).

Agency SSR Response:

The information system must protect the confidentiality and integrity of FTI during electronic transmission.

See IRS Publication 1075 Section 9.3.16.6 (page 89) for further guidance.

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9.3.16.7 SC-10: Network Disconnect

Describe how the agency terminates the network connection associated with a communications session at the end of the session or after a predefine period of user inactivity.

Per Publication 1075, the agency must terminate network connections associated with communications session at the end of the session of after 30 minutes of inactivity.

Note: This control addresses the termination of network connections that are associated with communications sessions (i.e., network disconnect) in contrast to user-initiated logical sessions in AC-12.

Agency SSR Response:

This control applies to both internal and external networks. Terminating network connections associated with communications sessions include, for example, de-allocating associated TCP/IP address/port pairs at the operating system level, or de-allocating networking assignments at the application level if multiple application sessions are using a single, operating system-level network connection.

See IRS Publication 1075 Section 9.3.16.7 (page 89) for further guidance.

IRS Response:		

9.3.16.8 SC-12: Cryptographic Key Establishment and Management

Describe how the agency establishes and manages cryptographic keys for required cryptography employed within the information system.

Note: Cryptographic key management and establishment can be performed using manual procedures or automated mechanisms with supporting manual procedures.

Agency SSR Response:

When Public Key Infrastructure (PKI) is used, the agency shall establish and manage cryptographic keys using automated mechanisms with supporting procedures or manual procedures. Cryptographic key management and establishment can be performed using manual procedures or automated mechanisms with supporting manual procedures. Agencies should manage trust stores to ensure that only approved trust anchors are in such trust stores. This includes certificates with visibility external to organizational information systems and certificates related to the internal operations of systems.

See IRS Publication 1075 Section 9.3.16.8 (page 89) for further guidance.

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9.3.16.9 SC-13: Cryptographic Protection

Describe how the agency implements cryptographic modules in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, and standards.

Agency SSR Response:

When cryptography (encryption) is employed within the information system, the system must perform all cryptographic operations using Federal Information Processing Standard (FIPS) 140-2 validated cryptographic modules with approved modes of operation.

See IRS Publication 1075 Section 9.3.16.9 (page 90) for further guidance.

IRS Response:

9.3.16.10 SC-15: Collaborative Computing Devices

Describe how the agency manages collaborative computing devices. Include how the agency:

- A) Prohibits remote activation of collaborative computing devices.
- B) Provides an explicit indication of use to users physically present at the devices.

Note: Collaborative computing devices include, for example, networked white boards, cameras, and microphones. Explicit indication of use includes, for example, signals to users when collaborative computing devices are activated.

Agency SSR Response:

The information system shall prohibit remote activation of collaborative computing mechanisms and provides an explicit indication of use to the local users.

See IRS Publication 1075 Section 9.3.16.10 (page 90) for further guidance.

IRS Response:
9.3.16.11 SC-17: Public Key Infrastructure Certificates
Describe how the agency issues public key infrastructure certificates or obtains public key infrastructure certificates from an approved service provider.
Agency SSR Response:
The agency shall establish PKI policies and practices, as necessary. For all certificates, agencies should manage information system trust stores to ensure only approved trust anchors are in the trust stores. This control addresses both certificates with visibility external to organizational information systems and certificates related to the internal operations of systems, for example: application-specific time services.
See IRS Publication 1075 Section 9.3.16.11 (page 90) for further guidance.
IRS Response:
9.3.16.12 SC-18: Mobile Code
 Describe how the agency regulates the use of mobile code throughout the environment. Include how the agency: A) Defines acceptable and unacceptable mobile code and mobile code technologies. B) Establishes usage restrictions and implementation guidance for acceptable mobile code and mobile code technologies. C) Authorizes, monitors, and controls the use of mobile code within the information system.
Note: Mobile code technologies include, for example, Java, JavaScript, ActiveX, Postscript, PDF, Shockwave movies, Flash animations, and
VBScript, which are common installations on most end user workstations. Usage restrictions and implementation guidance apply to both the selection and use of mobile code installed on servers and mobile code downloaded and executed on individual workstations and devices (e.g., tablet computers and smartphones).
Agency SSR Response:
The agency shall establish usage restrictions and implementation guidance for mobile code technologies based on the potential to cause damage to the information system if used maliciously.
See IRS Publication 1075 Section 9.3.16.12 (page 90) for further guidance.
IRS Response:

9.3.16.13 SC-19: Voice Over Internet Protocol

Describe how the agency controls Voice Over Internet Protocol (VoIP) technologies. Include how the agency:

- A) Establishes usage restrictions and implementation guidance for VoIP technologies based on the potential to cause damage to the information system if used maliciously.
- B) Authorizes, monitors, and controls the use of VoIP within the information system.

Note: Additional requirements for protecting FTI transmitted by VoIP systems are provided in Section 9.4.15, VoIP Systems, of Publication 1075.

Agency SSR Response:

The agency shall establish, document and control usage restrictions and implementation guidance for Voice over Internet Protocol (VoIP) technologies.

See IRS Publication 1075 Section 9.3.16.13 (pages 90-91) for further guidance.

IRS Response	IRS Re	odes	nse:
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9.3.16.14 SC-23: Session Authenticity

Describe how the agency protects the authenticity of communications sessions.

Note: This control addresses communications protection at the session level versus the packet level (e.g., sessions in service-oriented architectures providing Web-based services) and establishes grounds for confidence at both ends of communications sessions in ongoing identities of other parties and in the validity of information transmitted.

Agency SSR Response:

The information system shall provide mechanisms to protect the authenticity of communications sessions. Authenticity protection includes, for example: protecting against man-in-the-middle attacks/session hijacking and the insertion of false information into sessions.

See IRS Publication 1075 Section 9.3.16.14 (page 91) for further guidance.

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9.3.16.15 SC-28: Protection of Information at Rest

Describe how the agency protects the confidentiality and integrity of FTI at rest. Include how the agency:

- A) Protects the confidentiality and integrity of information at rest when located on a secondary (non-mobile) storage device (e.g., disk drive, tape drive) with cryptography mechanisms.
- B) Encrypts FTI stored on deployed user workstations, in non-volatile storage, with FIPS-validated or National Security Agency (NSA)-approved encryption during storage (regardless of location) except when no approved encryption technology solution is available that addresses the specific technology.
- C) Encrypts mobile devices at rest.

Note: Refer to Section 9.3.1.14, Access Control for Mobile Devices (AC-19), and Section 9.4.8, Mobile Devices, of Publication 1075 for additional information.

Agencies may employ different mechanisms to achieve confidentiality and integrity protections, including the use of cryptographic mechanisms, file share scanning, and integrity protection. Agencies may also employ other security controls, including, for example – secure offline storage in lieu of online storage, when adequate protection of information at rest cannot otherwise be achieved or when continuously monitoring to identify malicious code at rest.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.16.15 (page 91) for further guidance.

Agencies may employ different mechanisms to achieve confidentiality and integrity protections, including the use of cryptographic mechanisms, file share scanning, and integrity protection. Agencies may also employ other security controls, including, for example, secure offline storage in lieu of online storage, when adequate protection of information at rest cannot otherwise be achieved or when continuously monitoring to identify malicious code at rest. The confidentiality and integrity of information at rest shall be protected when located on a secondary (non-mobile) storage device (e.g., disk drive, tape drive) with cryptography mechanisms.

IRS Response:

9.3.17 System and Information Integrity (SI)

9.3.17.1 SI-1: System and Information Integrity Policy and Procedures

Describe how the agency maintains and disseminates to designated agency officials:

- A) A system and information integrity policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. Please include details regarding policy review/update.
 - Per Publication 1075, the agency must review policies, and update as necessary: every three years or if there is a significant change.
- B) System and information integrity procedures to facilitate the policy and SI related security controls. Please include details regarding procedure review/update.
 - Per Publication 1075, the agency must review procedures, and update as necessary: annually.

Agency SSR Response:

The agency must develop, document, disseminate, and update as necessary system and information integrity policy and procedures. See IRS Publication 1075 Section 9.3.17.1 (pages 91-92) for further guidance.

IRS Response:

In your response, please include related:

- Policy/Procedures Titles and/or identifier(s)
- Version number
- Approval / Update Dates
- Executive Level Approver(s)
- A Short narrative describing policy contents and purpose

Annotated SSR Template

Please include the agency's review frequency for both policies and procedures.

9.3.17.2 SI-2: Flaw Remediation

Describe how the agency handles flaw remediation for information systems and system components containing, processing, or transmitting FTI. Describe how the agency:

- A) Identifies, reports, and corrects information system flaws.
- B) Tests software and firmware updates related to flaw remediation for effectiveness and potential side effects before installation.
- C) Installs security-relevant software and firmware updates based on severity and associated risk to the confidentiality of FTI.
- D) Incorporates flaw remediation into the agency configuration management process.
- E) Centrally manages the flaw remediation process. (CE1)

Note: Security-relevant software updates include, for example, patches, service packs, hot fixes, and antivirus signatures.

Agency SSR Response:

The agency must identify, report, and correct information system flaws.

See IRS Publication 1075 Section 9.3.17.2 (page 92) for further guidance.

IRS Response:

9.3.17.3 SI-3: Malicious Code Protection

Describe how the agency applies malicious code protection mechanisms, this includes: antivirus software and antimalware and intrusion detection systems. Describe how the agency:

- A) Employs malicious code protection mechanisms at information system entry and exit points to detect and eradicate malicious code.
- B) Updates malicious code protection mechanisms whenever new releases are available in accordance with agency configuration management policy and procedures.
- C) Configures malicious code protection mechanisms to:
 - Perform periodic scans of the information system weekly and real-time scans of files from external sources at endpoint and network entry/exit points as the files are downloaded, opened, or executed in accordance with agency security policy.
 - Either block or quarantine malicious code and send an alert to the administrator in response to malicious code detection.
- D) Addresses the receipt of false positives during malicious code detection and eradication and the resulting potential impact on the availability of the information system.
- E) Centrally manages malicious code protection mechanisms. (CE1)
- F) Automatically updates malicious code protection mechanisms. (CE2)

Agency SSR Response:

The information system must implement protection against malicious code (e.g., viruses, worms, Trojan horses) that, to the extent possible, includes a capability for automatic updates.

See IRS Publication 1075 Section 9.3.17.3 (pages 92-93) for further guidance.

IRS Response:

Information system entry and exit points include, for example, firewalls, electronic mail servers, Web servers, proxy servers, remote access servers, workstations, notebook computers, and mobile devices.

Malicious code includes, for example, viruses, worms, Trojan horses, and spyware. Malicious code can also be encoded in various formats (e.g., UUENCODE, Unicode), contained within compressed or hidden files or hidden in files using steganography. Malicious code can be transported by different means, including, for example, Web accesses, electronic mail, electronic mail attachments, and portable storage devices.

9.3.17.4 SI-4: Information System Monitoring

Describe how the agency monitors the information system and hosting network. Include how the agency:

- A) Monitors the information system to detect: attacks and indicators of potential attacks; and unauthorized local, network, and remote connections.
- B) Identifies unauthorized use of the information system.
- C) Deploys monitoring devices: (i) strategically within the information system to collect agency-determined essential information; and (ii) at ad hoc locations within the system to track specific types of transactions of interest to the agency.
- D) Protects information obtained from intrusion-monitoring tools from unauthorized access, modification, and deletion.
- E) Heightens the level of information system monitoring activity whenever there is an indication of increased risk to agency operations and assets, individuals, other organizations, or the nation, based on law enforcement information, intelligence information, or other credible sources of information.
- F) Provides information system monitoring information to designated agency officials (as needed).
- G) Analyzes outbound communications traffic at the external boundary of the information system and selected interior points within the network (e.g., sub-networks, subsystems) to discover anomalies.
- H) Employs automated mechanisms to alert security personnel of inappropriate or unusual activities with security implications. (CE11)
- I) Implements host-based monitoring mechanisms (e.g., Host intrusion prevention system (HIPS)) on information systems that receive, process, store, or transmit FTI. (CE23)
- J) Configures information systems to monitor inbound and outbound communications traffic continuously for unusual or unauthorized activities or conditions. (CE4)
- K) Configures information systems to alert designated agency officials when indications of compromise or potential compromise occur. (CE5)
- L) Configures information systems to notify designated agency officials of detected suspicious events and take necessary actions to address suspicious events. (CE7)

Agency SSR Response:

Intrusion detection tools and techniques must be employed to monitor system events, detect attacks, and identify unauthorized use of the information system and FTI. External monitoring includes the observation of events occurring at the information system boundary (i.e., part of perimeter defense and boundary protection). Internal monitoring includes the observation of events occurring within the information system. Agencies can monitor information systems, for example, by observing audit activities in real time or by observing other system aspects such as access patterns, characteristics of access, and other actions. The monitoring objectives may guide determination of the events. Information system monitoring capability is achieved through a variety of tools and techniques (e.g., intrusion detection systems, intrusion prevention systems, malicious code protection software, scanning tools, audit record monitoring software, network monitoring software).

See IRS Publication 1075 Section 9.3.17.4 (pages 93-94) for further guidance.

IRS Response:

Strategic locations for monitoring devices include, for example, selected perimeter locations and nearby server farms supporting critical applications, with such devices typically being employed at the managed interfaces.

9.3.17.5 SI-5: Security Alerts, Advisories, and Directives

Describe how the agency utilizes information provided from security alerts, advisories, and directives. Include how the agency:

- A) Receives information system security alerts, advisories, and directives from designated external organizations on an ongoing basis.
- B) Generates internal security alerts, advisories, and directives as deemed necessary.
- C) Disseminates security alerts, advisories, and directives to designated agency officials.
- D) Implements security directives in accordance with established time frames or notify the issuing agency of the degree of noncompliance.

Agency SSR Response:

The agency shall receive and review information system security alerts/advisories on a regular basis, issues alerts/advisories to appropriate personnel, and takes appropriate actions in response.

See IRS Publication 1075 Section 9.3.17.5 (pages 94-95) for further guidance.

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9.3.17.6 SI-8: Spam Protection

Describe how the agency:

- A) Employs spam protection mechanisms at information system entry and exit points to detect and take action on unsolicited messages.
- B) Updates spam protection mechanisms when new releases are available in accordance with agency configuration management policy and procedures.

Agency SSR Response:

Information system entry and exit points include, for example: firewalls, electronic mail servers, web servers, proxy servers, remote-access servers, workstations, mobile devices, and notebook/laptop computers. Spam can be transported by different means including, for example: electronic mail, electronic mail attachments, and web accesses. Spam protection mechanisms include, for example, signature definitions.

See IRS Publication 1075 Section 9.3.17.6 (page 95) for further guidance.

IRS Response

9.3.17.7 SI-10: Information Input Validation

Describe how the agency checks the validity and accuracy of information system inputs.

Checking the valid syntax and semantics of information system inputs (e.g., character set, length, numerical range, and acceptable values) verifies that inputs match specified definitions for format and content. Input validation helps to ensure accurate and correct inputs and prevent attacks such as cross-site scripting and a variety of injection attacks.
See IRS Publication 1075 Section 9.3.17.7 (page 95) for further guidance.
IRS Response:
9.3.17.8 SI-11: Error Handling
Describe how the agency:
 A) Generates error messages that provide information necessary for corrective actions without revealing information that could be exploited by adversaries.
B) Reveals error messages only to designated agency officials.
Agency SSR Response:
Agencies should carefully consider the structure/content of error messages. The extent to which information systems are able to identify and handle error conditions is guided by organizational policy and operational requirements. Information that could be exploited by adversaries includes, for example, erroneous logon attempts with passwords entered by mistake as the username, mission/business information that can be derived from (if not stated explicitly by) information recorded, and personal information such as account numbers, social security numbers, and credit card numbers. See IRS Publication 1075 Section 9.3.17.8 (page 95) for further guidance.
IRS Response:
9.3.17.9 SI-12: Information Handling and Retention
Describe how the agency handles and retains information within the information system and information output from the system in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, standards, and operational requirements.
Agency SSR Response:
The agency must handle and retain output from the information system, as necessary to document that specific actions have been taken.
See IRS Publication 1075 Section 9.3.17.9 (page 95) for further guidance.
IRS Response:

Agency SSR Response:

9.3.17.10 SI-16: Memory Protection

Describe how the agency implements safeguards to protect its memory from unauthorized code execution.

Note: Some adversaries launch attacks with the intent of executing code in non-executable regions of memory or in memory locations that are prohibited. Security safeguards employed to protect memory include, for example, data execution prevention and address space layout randomization. Data execution prevention safeguards can either be hardware-enforced or software-enforced, with hardware providing the greater strength of mechanism.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.17.10 (page 95) for further guidance.

IRS Response:

9.3.18 Program Management (PM)

9.3.18.1 PM-2: Senior Information Security Officer

Describe how the agency appoints a senior information security officer with the mission and resources to coordinate, develop, implement, and maintain an agency-wide information security program.

Note: The security officer described in this control is an agency official. This official is the senior information security officer. Agencies may also refer to this official as the senior information security officer or chief information security officer.

Agency SSR Response:

See IRS Publication 1075 Section 9.3.18.1 (page 96) for further guidance.

IRS Response:

Please include reference to a policy and/or procedure that addresses appropriate security roles and responsibilities. Additionally, please include the name and contact information for the appointed Senior Information Security Officer and a list of his/her responsibilities.

9.4.1 Cloud Computing Environments

9.4.1.1 Cloud Computing Requirements

If the agency employs a cloud computing environment, describe how the agency meets the following requirements:

- A) <u>Notification Requirement</u>: The agency must notify the Office of Safeguards at least 45 days prior to transmitting FTI into a cloud environment.
- B) <u>Data Isolation</u>: Software, data, and services that receive, process, store, or transmit FTI must be isolated within the cloud environment so that other cloud customers sharing physical or virtual space cannot access other customer data or applications.
- C) <u>SLA</u>: The agency must establish security policies and procedures based on IRS Publication 1075 for how FTI is stored, handled, and accessed inside the cloud through a legally binding contract or SLA with its third-party cloud provider.
- D) <u>Data Encryption in Transit</u>: FTI must be encrypted in transit within the cloud environment. All mechanisms used to encrypt FTI must be FIPS 140-2 compliant, and operate using the FIPS 140-2 compliant module. This requirement must be included in the SLA.
- E) <u>Data Encryption at Rest</u>: FTI may need to be encrypted while at rest in the cloud, depending upon the security protocols inherent in the cloud. If the cloud environment cannot appropriately isolate FTI, encryption is a potential compensating control. All mechanisms used to encrypt FTI must be FIPS 140-2 compliant and operate using the FIPS 140-2 compliant module. This requirement must be included in the SLA, if applicable.
- F) <u>Persistence of Data in Relieved Assets</u>: Storage devices where FTI has resided must be securely sanitized or destroyed using methods acceptable by NSA and Central Security Service (CSS). This requirement must be included in the SLA.
- G) Risk Assessment: The agency must conduct an annual assessment of the security controls in place on all information systems used for receiving, processing, storing, or transmitting FTI. For the annual assessment immediately prior to implementation of the cloud environment and each annual risk assessment (or update to an existing risk assessment) thereafter, the agency must include the cloud environment. The Office of Safeguards will evaluate the risk assessment as part of the notification requirement in Requirement A.
- H) <u>Security Control Implementation</u>: Customer-defined security controls must be identified, documented, and implemented. The customer-defined security controls, as implemented, must comply with requirements in this publication.

Agency SSR Response:

If the agency does not employ a cloud computing environment, this control will be Not Applicable. If the agency does (and FTI is received, processed, stored, or transmitted throughout the cloud) please ensure responses for A-H above are documented in this section.

	See IRS Publication	1075 Section 9.4.1 ((pages 97-98)	for further :	guidance.
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IRS Response:	
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9.4.2 Data Warehouse	

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9.4.2.1 Data Warehouse Requirements	
Does the agency store or process FTI in a data	□ Yes
warehouse environment(s)?	□ No
	Note: Data Warehouse controls are only applicable if the Data
	Warehouse is implemented in the computer system(s) that
	store, transmit, or process FTI. If applicable, please ensure all
	data warehouse controls are documented and included in the
	agency's responses throughout Section 9.
	If a Data Warehouse environment is not applicable to your
	agency's use of FTI, please mark each Data Warehouse section
	as Not Applicable.
If Yes, has the agency provided the required notification	☐ Yes
to the Office of Safeguards?	
	□ No
If Yes, has the agency incorporated a discussion of the	□ Yes
data warehouse controls in this SSR?	□ No
9.4.3 Email Co	ommunications
Describe whether FTI is permitted to be sent via email. If F	TI is prohibited from inclusion within emails or email
attachments, describe how the agency documents and dist	tributes such a policy.
If FTI is allowed to be included within emails or email attac	hments, describe how the agency has implemented the
following:	
	sure FTI is properly protected and secured when being
transmitted via email.	
 Mail servers and clients must be securely configured the confidentially of FTI transmitted in the email sys 	d according to the requirements within this publication to protect
<u> </u>	ured according to the requirements within this publication to
I =	ies, and provide an additional security layer to an agency's mail
servers and clients.	ies, and provide an additional security layer to an agency 5 mail
	e.g., email subject contains "FTI") to ensure that the recipient is
aware that the message content contains FTI.	
E) Audit logging must be implemented to properly trac	
F) Email transmissions that contain FTI must be encryp	_
	more points within the email delivery process to protect against
viruses, worms, and other forms of malware.	
Agency SSR Response:	
Please ensure responses for A-G above are documented in this	section. If FTI is prohibited from inclusion within emails or email
attachments, please describe how the agency documents and o	distributes such a policy.
See IRS Publication 1075 Section 9.4.3 (pages 98-99) for further	r guidance.
IDC Daniero	
IRS Response:	
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9.4.4 Fax Equipment

Describe whether FTI is permitted to be sent via fax. If FTI is prohibited from inclusion within fax communications, describe how the agency documents and distributes such a policy.

If FTI is allowed to be included within fax communications, describe how the agency has implemented the following:

- A) Have a trusted staff member at both the sending and receiving fax machines.
- B) Accurately maintain broadcast lists and other preset numbers of frequent recipients of FTI.
- C) Place fax machines in a secured area.
- D) Include a cover sheet on fax transmissions that explicitly provides guidance to the recipient, which includes:
 - A notification of the sensitivity of the data and the need for protection; and
 - A notice to unintended recipients to telephone the sender—collect, if necessary—to report the disclosure and confirm destruction of the information.

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See IRS Publication 1075 Section 9.4.4 (page 99) for further guidance. If FTI is prohibited from inclusion within fa	X
communications, please describe how the agency documents and distributes such a policy.	

IRS Response:

9.4.5 Integrated Voice Response Systems

Identify whether the agency provides FTI over the telephone to a customer via an Integrated Voice Response (IVR) system. If FTI has implemented an IVR, describe how the agency has implemented the following:

- A) The LAN segment where the IVR system resides is firewalled to prevent direct access from the Internet to the IVR system.
- B) The operating system and associated software for each system within the architecture that receives, processes, stores, or transmits FTI to an external customer through the IVR is hardened in accordance with the requirements in this publication and is subject to frequent vulnerability testing.
- C) Independent security testing must be conducted on the IVR system prior to implementation.
- D) Access to FTI via the IVR system requires a strong identity verification process. The authentication must use a minimum of two pieces of information although more than two are recommended to verify the identity. One of the authentication elements must be a shared secret only known to the parties involved and issued by the agency directly to the customer. Examples of shared secrets include a unique username, PIN number, password, or pass phrase issued by the agency to the customer through a secure mechanism. Case number does not meet the standard as a shared secret because that case number is likely shown on all documents the customer receives and does not provide assurance that it is only known to the parties involved in the communication.

Agency	y SSR	Res	ponse:
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see iks Publication 1075 Section 9.4.5 (pages 99-100) for further guidance.	

IRS Response:		

	9.4.6 Live	Data	Testing
		Date	resting
Does	the agency use live FTI in a test environment(s)?		Yes
			No
		If Ye	s, briefly describe:
		<u> </u>	
	, has the agency provided the required notification e Office of Safeguards?		Yes
to the	: Office of Safeguarus:		No
If Yes	, has the agency incorporated a discussion of the		Yes
	environment controls in this SSR?		
			No
	9.4.7 Medi	a Sar	nitization
See 9	.3.10.6 MP-6: Media Sanitization		
300 3	.5.10.0 Wil C. Wedid Samezation		
	9.4.8 Mo	hile I	Devices
See 9	.3.1.14 AC-19: Access Control for Mobile Devices		
	9.4.9 Multi-Fu	ınctio	onal Devices
Descr	ibe whether multi-functional devices (MFD) are pern	nitted	for the processing of FTI. If FTI is prohibited from such
devic	es, describe how the agency documents and distribu	tes suc	ch a policy.
If the	agency permits the use of MFDs to process FTI, desc	ribe h	ow the agency has implemented the following:
A)	The agency should have a current security policy in	place	for secure configuration and operation of the MFD.
B)			
C)	assigning a dedicated static IP address to the MFD. C) Strong security controls should be incorporated into the MFD's management and administration.		
(C) (D)			
	 MFD access enforcement controls must be configured correctly, including access controls for file shares, administrator and non-administrator privileges, and document retention functions. 		
E)	The MFD should be locked with a mechanism to pre	event p	physical access to the hard disk.
F)		ost cu	rrent firmware available and should be currently supported
6)	by the vendor.		
G)	The MFD and its print spoolers have auditing enable enabled), and audit logs should be collected and re-		
н)	All FTI data in transit should be encrypted when mo		
1)		_	nd disposal procedure requirements (see Section 9.3.10.6,
,	Media Sanitization (MP-6), and Section 9.4.7, Media		
Agency SS	SR Response:		
		uidanc	e. If FTI is prohibited from such devices, please describe
how the a	gency documents and distributes such a policy.		
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9.4.11 Storage Area Network	S
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Describe whether Storage Area Networks (SAN) are permitted for the storage and processing of FTI. If FTI is prohibited from such devices, describe how the agency documents and distributes such a policy.

If the agency permits the use of SANs to process FTI, describe how the agency has implemented the following:

- A) FTI must be segregated from other agency data within the SAN environment.
- B) Access controls must be implemented and strictly enforced for all SAN components to limit access to disks containing FTI to authorized users.
- C) Fibre channel devices must be configured to authenticate other device with which they communicate in the SAN and authenticate administrator connections.
- D) FTI must be encrypted while in transit within the SAN environment. SAN management traffic must also be encrypted for SAN components.
- E) SAN components must be physically protected in accordance with the minimum protection standards for physical security described in Section 4.0, Secure Storage—IRC 6103(p)(4)(B).
- F) All components of the SAN that receive, process, store, or transmit FTI must be hardened in accordance with the requirements in Publication 1075 (see SAN SCSEM available on the Office of Safeguards website).
- G) SAN components must maintain an audit trail and review it on a regular basis to track access to FTI in the SAN environment.

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See IRS Publication 1075 Section 9.4.11 (pages 104-105) for further guidance.	If FTI is prohibited from such devices, please
describe how the agency documents and distributes such a policy.	

IRS Response:	tion Environments
9.4.14 Virtualiza	tion Environments
Does the agency use virtual environment(s) to process FTI?	☐ Yes ☐ No If Yes, briefly describe: These are specific IRS requirements for FTI that is processed in virtual environments. Focus on the technical requirements as the notification requirements will only be applicable after the systems go live.
If Yes, has the agency provided the required notification to the Office of Safeguards?	□ Yes □ No
If Yes, has the agency incorporated a discussion of the virtual environment controls in this SSR?	□ Yes □ No
9.4.15 Vo	OIP Systems

Describe whether VoIP networks are used to provide FTI to a customer. If the agency does employ a VoIP implementation, describe how the agency has implemented the following:

- A) VoIP traffic that contains FTI should be segmented off from non-VoIP traffic through segmentation. If complete segmentation is not feasible, the agency must have compensating controls in place and properly applied that restrict access to VoIP traffic that contains FTI.
- B) When FTI is in transit across the network (either Internet or state agency's network), the VoIP traffic must be encrypted using a NIST-approved method operating in a NIST-approved mode.
- C) VoIP network hardware (servers, routers, switches, firewalls) must be physically protected in accordance with the minimum protection standards for physical security outlined in Section 4.0, Secure Storage—IRC 6103(p)(4)(B).
- D) Each system within the agency's network that transmits FTI to an external customer through the VoIP network is hardened in accordance with the requirements in this publication and is subject to frequent vulnerability testing.
- E) VoIP-ready firewalls must be used to filter VoIP traffic on the network.
- F) Security testing must be conducted on the VoIP system prior to implementation with FTI and annually thereafter.
- G) VoIP phones must be logically protected, and agencies must be able to track and audit all FTI-applicable conversations and access.

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These are specific IRS requirements for VOIP networks that process FTI.

See IRS Publication 1075 Section 9.4.15 (pages 107-108) for further guidance.

IRS Response:

9.4.16 Web-Based Systems

Describe whether an external Web-based system or website is used to provide FTI to a customer. If the agency does employ a Web-based system, describe how the agency has implemented the following:

- A) The system architecture is configured as a three-tier architecture with physically separate systems that provide layered security of the FTI, and access to the database through the application is limited.
- B) Each system within the architecture that receives, processes, stores, or transmits FTI to an external customer through the Web-based system or website is hardened in accordance with the requirements in this publication and is subject to frequent vulnerability testing.
- C) Access to FTI via the Web-based system or website requires a strong identity verification process. The authentication must use a minimum of two pieces of information although more than two is recommended to verify the identity. One of the authentication elements must be a shared secret only known to the parties involved and issued by the agency directly to the customer. Examples of shared secrets include a unique username, PIN number, password, or pass phrase issued by the agency to the customer through a secure mechanism. Case number does not meet the standard as a shared secret because that case number is likely shown on all documents the customer receives and does not provide assurance that it is only known to the parties involved in the communication.

Agency	55K	кеsр	ons	e:
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See IRS Publication 1075 Section 9.4.16 (page 108) for further guidance.	

IRS Response:		

9.4.17 Web Browser

Describe whether a web browser is used to access FTI. If the agency does employ a web browser to access FTI, describe how the agency has implemented the following:

- A) Private browsing must be enabled on the Web browser and configured to delete temporary files and cookies upon exiting the session.
- B) Install vendor-specified security patches and hot fixes regularly for the Web browser, add-ons, and Java.
- C) Security enhancements, such as pop-up blocker and content filtering, must be enabled on the Web browser.
- D) Configure the designated Web browser in accordance to the principle of least functionality and disable items, such as third-party add-ons.
- E) Deploy a Web gateway to inspect Web traffic and protect the user workstation from direct exposure to the Internet.
- F) FTI transmission within the agency's internal network must be encrypted using a cryptographic module that is FIPS 140-2 validated.
- G) Determine the business use of Java and approve the use of Java if is required for core business functions.

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See IRS Publication 1075 Section 9.4.17 (pages 108-109) for further guidance.

IRS Response:

9.4.18 Wireless Networks

Describe whether a wireless network is used to access FTI. If the agency does employ a wireless network to access FTI, describe how the agency has implemented the following:

- A) The agency should have WLAN management controls that include security policies and procedures, a complete inventory of all wireless network components, and standardized security configurations for all components.
- B) WLAN hardware (access points, servers, routers, switches, firewalls) must be physically protected in accordance with the minimum protection standards for physical security outlined in Section 4.0, Secure Storage—IRC 6103(p)(4)(B).
- C) Each system within the agency's network that transmits FTI through the WLAN is hardened in accordance with the requirements in this publication.
- D) The WLAN is architected to provide logical separation between WLANs with different security profiles and from the wired LAN.
- E) WLAN infrastructure that receives, processes, stores, or transmits FTI must comply with the Institute of Electrical and Electronic Engineers 802.11i wireless security standard and perform mutual authentication for all access to FTI via 802.1X and extensible authentication protocol.
- F) Vulnerability scanning should be conducted as part of periodic technical security assessments for the organization's WLAN.
- G) Wireless intrusion detection is deployed to monitor for unauthorized access, and security event logging is enabled on WLAN components in accordance with Section 9.3.3, Audit and Accountability.
- H) Disposal of all WLAN hardware follows media sanitization and disposal procedures in Section 9.3.10.6, Media Sanitization (MP-6), and Section 9.4.7, Media Sanitization.

Agency SSR Response:

See IRS Publication 1075 Section 9.4.18 (pages 109-110) for further guidance.

	10. Disclosure Awareness
	rmal disclosure awareness program. Provide procedure information for initial and annual sample copy of training materials presented to employees and contractors.
IRC Sections 7431, 7213,	s training and certification program employees and contractors must be advised of the provisions of and 7213A (see Exhibit 6, IRC Sec. 7431 Civil Damages for Unauthorized Disclosure of Returns and Exhibit 5, IRC Sec. 7213 Unauthorized Disclosure of Information).
	g FTI must have an awareness program that annually notifies all employees having access to FTI of the f the IRC, a definition of what returns and what return information is, and the civil and criminal sanctions for disclosure.
Attachments: Sample copy	y of training materials (required if changes have been made)
	Publication 1075: Section 6.3
Agency SSR Response:	
Soo IPS Publication 1075 Soc	ction 6.3 (pages 31-32) for further guidance.
see ins rubilcation 1073 set	ction 0.3 (pages 31-32) for further guidance.
IRS Response:	For both the initial certification and the annual certification, the employee or contractor must sign, either with ink or electronic signature, a confidentiality statement certifying his or her understanding of the security requirements. The initial certification and recertification must be documented and placed in the agency's files for review and retained for at least five years.

IRS Response: